

FRANKLIN COUNTY, OHIO

MULTI- JURISDICTIONAL HAZARD MITIGATION PLAN



Volume 2

DRAFT

SEPTEMBER 2023

SECTION 8. PLANNING TEAM

This section provides a description of the Franklin County Hazard Mitigation Plan's (HMP) update Planning Team, their responsibilities throughout the planning process, and the jurisdictional annexes developed as a result of their plan update efforts.

8.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

"Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan" [Section 201.6a(4)]

Members of the Planning Team have the expertise to develop the plan and have their jurisdiction's authority to implement the mitigation strategy developed during the planning process. The Planning Team is responsible for developing and reviewing draft sections of the plan, updating their respective annex, creating the mitigation strategy for their jurisdiction, and adopting the final plan.

For the Franklin County HMP update, a Planning Team was formed to leverage resources and to meet requirements for the federal Disaster Mitigation Action of 2000 (DMA) for as many eligible governments as possible. Members of the Planning Team consisted of representatives from each jurisdiction. The DMA defines a local government as follows:

Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Each participating Planning Team Member has prepared an annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

8.2 INITIAL SOLICITATION

Franklin County solicited the participation of all its municipalities at the commencement of this project. Franklin County, 40 of its municipalities, and the Ohio State University participated in the update process and have met the minimum requirements of participation as established by the County and Core Planning Team.

8.3 PLANNING TEAM EXPECTATIONS

The Planning Team agreed to the following Planning Team Member expectations, which were outlined in the letter sent by Franklin County on October 20, 2022, and confirmed at the kick-off meeting held on November 18, 2022 (see Appendix C [Meeting Documentation] for details):

- Provide representation at regular planning group meetings and workshops.
- Be responsible for providing data and information as requested.
- Review and comment on data and information compiled by the contract consultant relevant to their jurisdiction.
- Be responsible for completing plan documents specific to your municipality, using provided templates with guidance and assistance by the contract consultant.
- Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
- Facilitate public outreach efforts with residents and local stakeholders within your community using materials provided by the contract consultant.
- Assist with the identification of strengths, weaknesses, opportunities, and obstacles to implementing natural hazard mitigation within your community.
- Assist with the identification of past, ongoing, and appropriate future mitigation strategies and activities within your municipality.
- Review and comment on plan documents, specifically the draft and final plans prior to submission to Ohio EMA and FEMA.

As described in Section 7 (Plan Maintenance), the Planning Team is intended to remain active beyond the regulatory update to support plan maintenance. Regarding the composition of the Core Planning Team and Planning Team, it is recognized that individual commitments change over time, and it will be the responsibility of each jurisdiction and its representatives to inform the HMP Coordinator of any changes in representation.

8.4 JURISDICTIONAL ANNEX PREPARATION PROCESS

New to the 2023 HMP, jurisdictional annexes were used to provide a unique, stand-alone guide to mitigation planning for each participating jurisdiction. The Franklin County HMP Update is organized so that there is an annex for Franklin County and for every participating jurisdiction. Section 9 (Annexes) includes an annex for every jurisdiction.

8.4.1 Data Collection

Each jurisdiction was paired with a contract consultant mitigation planner to work with the mitigation team to update their annexes. Each jurisdiction was asked to participate in a municipal kick-off meeting, held on November 18, 2022, to review participant expectations and the updated information needed to

support the annex update. It was made clear that the annexes are sections of the plan that can be enhanced if more information is available to further customize all aspects of mitigation planning.

8.4.2 Hazard Ranking Exercise

The presentation of the risk assessment and hazard ranking for each jurisdiction was conducted April 27, 2023. At this meeting, the consultant presented the overall risk assessment for the hazards of concern and distributed jurisdiction-specific handouts with risk assessment results relevant to each plan participant. In addition, each Planning Team Member was asked to review the ranked hazards specific to its jurisdiction. Refer to Section 4.4 (Hazard Ranking) for the methodology of the hazard ranking process. The calculated ranking was presented to each jurisdiction, and they were asked to review the ranking and revise based on history of events, probability of occurrence, and the potential impact on people, property, and the economy. In addition, each jurisdiction was asked to rank their adaptive capacity for each hazard. Refer to Appendix B (Participation Matrix) for the input submitted by each municipality. The objectives of this exercise were to familiarize the Planning Team with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as “high” for each jurisdiction as a result of this exercise were considered to be priorities for identifying appropriate mitigation actions, although jurisdictions also identified actions to mitigate “medium” or “low” ranked hazards as appropriate.

8.4.3 Problem and Solutions Identification

After the draft risk assessment results were presented and hazard ranking exercise at the third Core Planning Team Meeting on April 14, 2023, attendees participated in a problem and solutions identification exercise to identify potential mitigation actions for the County’s hazards of concern. All problem and solutions identification exercise results were compiled and provided as a resource to plan participants at the Mitigation Strategy Workshop in April 2023. Refer to Appendix B (Participation Matrix) which provides the information captured via online survey by the participating jurisdictions.

8.4.4 Mitigation Strategy Workshop

A mitigation strategy workshop was conducted by the contracted planning consultant on April 27, 2023, for all participating jurisdictions to support the development of the updated mitigation strategy. To assist with the identification of implementable and action-oriented mitigation actions, the participating jurisdictions were provided with tools to help identify mitigation strategies: public survey responses, potential mitigation actions for each jurisdiction, and FEMA Mitigation Ideas. The purpose of this workshop was to guide the Planning Team in completing this portion of the planning process and discuss how projects that are well developed and documented are more quickly identifiable for selection when grants become available.

At the workshop, the Planning Team focused on developing problem statements based on the impacts of hazards in the County. The results of the updated risk assessment, problems and solutions identified during the capability assessment update and problem and solutions identification exercise, and

information gathered from the public survey were used to develop mitigation strategies. As a result, a mitigation workbook was compiled with potential mitigation actions for Franklin County and their participating jurisdictions. This workbook helped form a bridge between the hazard risk assessment, which quantifies impacts to each community, with the development of achievable mitigation strategies. Mitigation development worksheets were filled out by each jurisdiction to identify additional problem statements and draft action worksheets were developed.

8.4.5 Municipal Support Conference Calls

In addition to the municipal kick-off meeting, municipal support conference calls were held throughout the planning process. During these calls, the consultant worked one-on-one with Planning Team members to complete their jurisdictional annexes. Each section of the annex was discussed to ensure accuracy and completeness. This included, but not limited to, the following:

- Reviewing the calculated hazard ranking for the jurisdiction and provide input to adjust the ranking as necessary.
- Updating information regarding the jurisdiction's capabilities and past integration of hazard mitigation concepts.
- Identify mitigation initiatives that have reasonable potential to be accomplished within the lifespan of the HMP (five years), including both FEMA-eligible projects and those projects using funds from non-FEMA sources.

8.4.6 Jurisdictional Annexes

While the jurisdictional annex format is designed to document and assure local compliance with the DMA 2000 regulations, its greater purpose and function includes:

- Providing a locally relevant synthesis of the overall mitigation plan that can be readily presented, distributed, and maintained,
- Facilitating local understanding of the community's risk to natural hazards,
- Facilitating local understanding of the community's capabilities to manage natural hazard risk, including opportunities to improve those capabilities,
- Facilitating local understanding of the efforts the community has taken, and plans to take, to reduce their natural hazard risk,
- Facilitating the implementation of mitigation strategies, including the development of grant applications, and
- Providing a framework by which the community can continue to capture relevant data and information for future plan updates.

It is recognized that each jurisdiction's annex is a "living" document and will continue to be improved as resources permit. As such, its design is intended to promote and accommodate continued efforts to

maintain the annex to be current and to improve the effectiveness of the annex as the key tool, reference, and guiding document by which the jurisdiction will implement hazard mitigation locally.

The following provides a description of the various elements of the jurisdictional annex.

Section 9.X.1: Hazard Mitigation Planning Team: Identifies the hazard mitigation planning team who provided input during the planning process. Further detail is provided in Section 2 (Planning Process) and Appendix B (Participation Matrix).

Section 9.X.2: Jurisdictional Profile: Provides an overview and profile of the jurisdiction, including an identification of areas of known and anticipated future development and the vulnerability of those areas to the hazards of concern.

Section 9.X.3: Jurisdictional Capability Assessment and Integration: This subsection provides an inventory and evaluation of the jurisdiction's tools, mechanisms, and resources available to support hazard mitigation and natural hazard risk reduction. Within the municipal annexes, tables provide an inventory of the municipality's planning and regulatory, administrative, and technical, and fiscal, capabilities, respectively. Further, another table identifies the municipality's level of participation in state and federal programs designed to promote and incentivize local risk reduction efforts. Further information regarding Federal, State, and local capabilities may be found in the Capability Assessment portion of Section 5.

Section 9.X.4: National Flood Insurance Program (NFIP) Compliance: A tabular summary of the specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Section 9.X.5: Growth/Development Trends: Identifies of areas of known and anticipated future development and the vulnerability of those areas to the hazards of concern.

Section 9.X.6: Jurisdictional Risk Assessment:

- **Hazard Extent and Location:** Each annex includes a map (or series of maps) illustrating identified hazard zones and critical facilities. Further, these maps show areas of known or anticipated future development, as available and provided by the jurisdiction.
- **Hazard Event History:** Identifies hazard events that have caused significant impacts within the jurisdiction, including a summary characterization of those impacts as identified by the jurisdiction. The documentation of events and losses is critical to supporting the identification and justification of appropriate mitigation actions, including providing critical data for benefit-cost analysis. It is recognized that this "inventory" of events and losses is a work-in-progress and may continue to be improved as resources permit. As such, the lack of data or information for a specific event does not necessarily mean that the jurisdiction did not suffer significant losses during that event.
- **Hazard Ranking and Vulnerabilities:** This subsection provides information regarding each plan participant's vulnerability to the identified hazards. Full data and information on the hazards of concern, the methodology used to develop the vulnerability assessments, and the results of those

assessments that serve as the basis of these local risk rankings may be found in Section 4 (Risk Assessment).

Section 9.X.7: Mitigation Strategy and Prioritization: This section discusses and provides the status of past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritization.

- **Past Mitigation Initiative Status:** Where applicable, a review of progress on the jurisdiction's prior mitigation strategy is presented, identifying the disposition of each prior action, project, or initiative in the jurisdiction's updated mitigation strategy. Other completed or on-going mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this sub-section as well.
- **Additional Mitigation Efforts:** Other completed or on-going mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this subsection as well.
- **Proposed Hazard Mitigation Initiatives for the Plan Update:** Table 9.X-16 presents the jurisdiction's updated mitigation strategy. As indicated, applicable mitigation actions, projects and initiatives are further documented on an Action Worksheet which provides details on the project identification, evaluation, prioritization, and implementation process. Table 9.X-17 provides a summary of the local mitigation strategy prioritization process discussed in Section 6 (Mitigation Strategy).

8.4.7 Annex Review

Workshops and additional meetings (via email and/or teleconference) to complete the jurisdictional annexes were held with the Core Planning Team and Planning Team throughout the planning process. In preparation for the draft plan public review, each jurisdiction was asked to have their 'mitigation team' review their annex to ensure it was complete and accurate for posting to Franklin County Emergency Management and Homeland Security's mitigation website. To demonstrate broad and comprehensive review and input, each jurisdiction collected signatures from these representatives. Refer to Appendix B (Participation Matrix) to review the annex signature pages.

In summary, all participating communities and the County completed the Planning Team Member expectations and annex-preparation process. Details regarding these meetings are described further in Section 2 (Planning Process) and Section 6 (Mitigation Strategy). Completed jurisdictional annexes are presented in Section 9 (Annexes).

8.5 COVERAGE UNDER THE PLAN

Franklin County, 40 of its jurisdictions, and the Ohio State University met the participation requirements specified by the Core Planning Team. Any non-participating local jurisdiction within Franklin County can "dock" to this plan in the future following the linkage procedures defined in Appendix H (Linkage Procedures).

Table 8-1 lists the status of each participating jurisdiction and their ultimate status in this plan update. Refer to Appendix B (Participation Matrix) and Appendix C (Meeting Documentation) for details on participation and meeting attendance.

Table 8-1. Jurisdictional Status

Municipality	Attended Workshops and/or Meetings and Project Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
Franklin County	X	X	X	X
Bexley (C)	X	X	X	X
Blendon (Twp)	X	X	X	X
Brice (V)	X	X	X	X
Brown (Twp)	X	X	X	X
Canal Winchester (C)	X	X	X	X
Clinton (Twp)	X	X	X	X
Columbus (C)	X	X	X	X
Dublin (C)	X	X	X	X
Franklin (Twp)	X	X	X	X
Gahanna (C)	X	X	X	X
Grandview Heights (C)	X	X	X	X
Grove City (C)	X	X	X	X
Groveport (C)	X	X	X	X
Hamilton (Twp)	X	X	X	X
Harrisburg (V)	X	X	X	X
Hilliard (C)	X	X	X	X
Jackson (Twp)	X	X	X	X
Jefferson (Twp)	X	X	X	X
Lockbourne (V)	X	X	X	X
Madison (Twp)	X	X	X	X
Marble Cliff (V)	X	X	X	X
Mifflin (Twp)	X	X	X	X
Minerva Park (V)	X	X	X	X
New Albany (C)	X	X	X	X
Norwich (Twp)	X	X	X	X
Obetz (C)	X	X	X	X
Perry (Twp)	X	X	X	X
Plain (Twp)	X	X	X	X
Pleasant (Twp)	X	X	X	X
Prairie (Twp)	X	X	X	X
Reynoldsburg (C)	X	X	X	X
Sharon (Twp)	X	X	X	X
Truro (Twp)	X	X	X	X
Upper Arlington (C)	X	X	X	X
Urbancrest (V)	X	X	X	X
Valleyview (V)	X	X	X	X
Washington (Twp)	X	X	X	X
Westerville (C)	X	X	X	X
Whitehall (C)	X	X	X	X
Worthington (C)	X	X	X	X



Municipality	Attended Workshops and/or Meetings and Project Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
The Ohio State University	X	X	X	X

DRAFT

SECTION 9. JURISDICTIONAL ANNEX

9.1 FRANKLIN COUNTY

This section presents the jurisdictional annex for Franklin County that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the County, who in Franklin County participated in the planning process, an assessment of Franklin County's risk and vulnerability, the different capabilities used in Franklin County, and an action plan that will be implemented to achieve a more resilient community.

9.1.1 Hazard Mitigation Planning Team

Franklin County identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many County departments, including Emergency Management and Homeland Security (FCEM&HS); Engineering; and Soil and Water Conservation. FCEM&HS and Franklin County Engineering represented the County on the Core Planning Team and Planning Partnership. They supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 9.1-1 summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.1-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Jeff Young, EM&HS Director	Name/Title:	Connor Robb, EM&HS Specialist
Address:	5300 Strawberry Farms Blvd. Columbus, OH 43230	Address:	5300 Strawberry Farms Blvd. Columbus, OH 43230
Phone Number:	614-794-0213	Phone Number:	614-794-0213
FCEM&HSil:	jjyoung@franklincountyohio.gov	FCEM&HSil:	connor.robbs@FranklinCountyOhio.gov
National Flood Insurance Program (NFIP) Floodplain Administrator			
Name/Title:	Matt Brown, Planning Administrator		
Address:	970 Dublin Road, Columbus, OH 43215		
Phone Number:	614-525-3030		
FCEM&HSil:	mybrown@franklincountyohio.gov		

Additional Contributors:	
Name/Title:	Darrel Koerber, EM&HS Deputy Director
Method of Participation:	Served on the Core Planning Team; attended meetings; provided input throughout the planning process; identified mitigation actions for the County; reviewed the County's annex
Name/Title:	Carter Smith, IT Manager
Method of Participation:	Provided GIS data to use in updating the HMP; attended meetings; provided input throughout the planning process

9.1.2 Municipal Profile

Please refer to Section 3 (County Profile), Volume 1 of this HMP for details on Franklin County's population, location, climate, history, growth, and development.

9.1.3 Jurisdictional Capability Assessment and Integration

Franklin County performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of County capabilities:

- Planning, legal, and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For the County to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and county staff were surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Franklin County to identify opportunities for integration of mitigation concepts that can be incorporated into County procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Franklin County and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.1-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction Has This? (yes/no)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual/ Department/ Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Building Code & Residential Code of Ohio	County	Authority for adopting is Franklin County Board of Commissioners. Administered by Economic Development & Planning Department (EDP)
<p><i>How does this reduce risk?</i></p> <p>Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1-, 2-, and 3-family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to county building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, mechanical and planning uses. The Residential code gives builders a pre-identified checklist prior to construction leading to safer actions to accomplish goals.</p> <p>The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. Any projects in Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon, and Truro townships must apply for a Certificate of Zoning Compliance through the Franklin County EDP. Homeowners and/or building contractors are required to obtain a zoning compliance from the townships of Blendon, Canal Winchester, Jackson, Jefferson, Perry, Plain, Prairie, or Washington and then apply to the County Building Department for the building permit. In the villages of Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview, homeowners and building contractors are required to obtain a zoning compliance from the village and apply to the Department for the building permit. Groveport and Obetz will issue both the zoning compliance and the building permits.</p>				
Zoning/Land Use Code	Yes	Chapter 519 Township Zoning/Title 5 Township Zoning; Franklin County Zoning Resolution, Original adopted November 12, 1948, Amended and Readopted October 11, 2022	County	Authority for adopting is Franklin County Board of Commissioners. Administered by EDP
<p><i>How does this reduce risk?</i></p> <p>Helps to ensure appropriate separations and buffering between incompatible land uses. Prohibits development in floodways and requires development in floodway fringe areas to be designed so as to reduce risk. Requires a conditional use permit for floodplain development. Requires new developments and redevelopments to provide stormwater controls to reduce flooding. Includes stream setbacks in certain watersheds. Environmental constraints are considered when reviewing rezoning requests. Allows for conservation/cluster development to protect sensitive areas. Any projects in Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon, and Truro townships must apply for a Certificate of Zoning Compliance through the Franklin County EDP.</p>				
Subdivision Ordinance	Yes	Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012	County	Authority for adopting is Franklin County Planning Commission. Administered by EDP
<p><i>How does this reduce risk?</i></p> <p>Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells, and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions.</p>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Ohio Administrative Code Rule 901:10-3-11 Storm Water Permits and individual	State	Ohio Department of Natural Resources, Division of Soil and Water Conservation
<p><i>How does this reduce risk?</i></p> <p>Shows best management practices for stormwater and gives the steps for jurisdictions to receive their permit requirements and construction requirements.</p>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction Has This? (yes/no)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual/ Department/ Agency Responsible
Real Estate Disclosure	Yes	Chapter 4735 Real Estate Brokers. April 20th, 2022	State	Ohio HUD
<i>How does this reduce risk?</i> Gives the brokers a set of rules to follow to avoid trouble. Shows powers and duties of the real estate commission.				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	Yes	Chapter 3745 Ohio Environmental Protection Agency	State	Ohio EPA
<i>How does this reduce risk?</i> Mitigates and sets rules on water quality, open burning regulations/air pollution control and waste control.				
Flood Damage Prevention Ordinance	Yes	Franklin County Special Resolution NFIP Regulation, original adoption September 26, 1978, amended and readopted September 19, 2007	County	Authority for adopting is Franklin County Board of Commissioners. Administered by EDP
<i>How does this reduce risk?</i> Prohibits development in floodways and requires development in floodway fringes to be designed to reduce risk; ensures the maintenance of floodplain areas within the 100-year flood area. Lists the duties of the Chief of Division of waters to mitigate flooding in vulnerable areas.				
Wellhead Protection	Yes	Chapter 3745-9/Well construction September 1, 2022, Source Water Assessment and Protection Program	State	Ohio EPA
<i>How does this reduce risk?</i> Gives rules on when it is okay to operate wells making sure safety actions are taking place. Shows who to call if you do come upon a defective well				
Emergency Management Ordinance	Yes	Section 5502.21- 5502.27 Emergency Management Definitions/Countywide FCEM&HS, September 29, 1999	State	Legislative Service Commission
<i>How does this reduce risk?</i> Gives clear definitions on emergency management titles and demonstrates the roles/job actions that may take place at FCEM&HS; gives set standards for emergency management goals and gives direct definitions on important emergency management aspects				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				
Planning Documents				
Comprehensive/Master Plan	Yes	See Below	Local	Authority for adopting is Franklin County Board of Commissioners. Administered by EDP
<i>How does this reduce risk?</i> Community plans include recommendations related to protecting environmentally sensitive areas including streams and wetlands. Plans serve as policy guidance for decision makers considering rezoning requests. <ul style="list-style-type: none"> Big Darby Accord Watershed Master Plan Big Darby Town Center Master Plan Blacklick-Madison Area Plan Blendon Community Plan Brown Township Comprehensive Plan [2005] Clinton West Neighborhood Plan Clinton-Mifflin Land Use Plan Jackson Township Comprehensive Plan Pleasant Township Comprehensive Plan Scioto-Franklin Neighborhood Plan Southwest Area Plan Washington Township Comprehensive Plan Westland Area Interim Development Framework 				
Capital Improvement Plan	Yes	Franklin County Capital Improvement Plan. Run by the County Planning and Programming Engineers. Columbus also has an improvement plan.	County/City	County Planning and Programming Engineers



	Jurisdiction Has This? (yes/no)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual/ Department/ Agency Responsible
<i>How does this reduce risk?</i> Monitor development schedules and work with other departments to identify safety, congestion and structural problems on roads/bridges.				
Disaster Debris Management Plan	N/A	Franklin County Solid Waste Authority of Central Ohio (SWACO) Administrative Building does have a Solid Waste Management Plan	-	-
<i>How does this reduce risk?</i> Budget and fees to finance the plan, waste inventory, projections and strategies, facilities and analysis of the progress made toward achieving state solid waste reduction goals and the SWACO district rules.				
Floodplain Management or Watershed Plan	Yes	Section 1521 Floodplain Management Activities. January 1, 2016 Columbus Watershed Management/Franklin County Floodplain Management team	City/County	Columbus Public Utilities/EDP
<i>How does this reduce risk?</i> Reduces the risk of bad drinking water and allows for safe housing in nonhazardous areas.				
Stormwater Management Plan	Yes	Franklin County Storm Water Manual. March 13, 2012	County	Franklin County Drainage Engineer
<i>How does this reduce risk?</i> The purpose of the manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals.				
Open Space Plan	Yes	Section 164.22 Eligible Projects. July 21, 2022	State	Natural Recourses Assistance Counsel
<i>How does this reduce risk?</i> Gives clear definitions on what is clear space and shows how one can apply to build on open land without a problem.				
Urban Water Management Plan	Yes	Chapter 1521 Division of Water Recourses. January 1, 2016	County/Local	Columbus Public Utilities, The Division of Water
<i>How does this reduce risk?</i> Creates healthy water safety goals and outlines specific actions to keep safe urban water management activities.				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	Yes	Franklin County Economic Development Strategic Plan, Adopted May 2019	County	Authority for adopting is Franklin County Board of Commissioners. Administered by EDP
<i>How does this reduce risk?</i> Includes a goal that economic development activities and programs should promote and improve environmental sustainability.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	yes	Chapter 1531 Division of wildlife. September 29, 2017	State	Franklin County Animal Services
<i>How does this reduce risk?</i> Gives proper wildlife definitions, Regulation of deer, publication of rules. This gives the community members a clear showing of how to handle wildlife and what is allowed.				
Community Forest Management Plan	Yes	Chapter 1501:3-10 Forest Management Plans. October 20, 2021	State	Ohio Department of Natural Resources (ODNR)
<i>How does this reduce risk?</i> The ODNR plan gives information on how to alleviate risk that could happen within a forest. For example, Fire training, protection, and forest health				
Transportation Plan	Yes	Metropolitan Transportation Plan Franklin County and Delaware County Coordinated Transportation Plan	Regional	Mid-Ohio Regional Planning Commission



	Jurisdiction Has This? (yes/no)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual/ Department/ Agency Responsible
<p><i>How does this reduce risk?</i></p> <ul style="list-style-type: none"> Metropolitan Transportation Plan—Includes a goal to protect natural resources and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community. Coordinated Transportation Plan (April 2018-2021)—Identifies community transportation resources and mobility, to find gaps and needs with resources and to find an approach to solve those problems. 				
Agriculture Plan	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Climate Action/ Resiliency/Sustainability Plan	Yes	Columbus Climate Action Plan December 2021	Local/City	Sustainable Columbus
<p><i>How does this reduce risk?</i></p> <p>Helps find gaps in climate planning and gives responsibility and action plans for future climate growth.</p>				
Tourism Plan	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Business/ Downtown Development Plan	Yes	Columbus Downtown Strategic Plan 2022	Local/City	Columbus Downtown Development Corporation
<p><i>How does this reduce risk?</i></p> <p>Creates a safe and economic outlook for the city for riverfront mitigation, traffic flow mitigation. Develops a set of goals to create a well-balanced and diverse community for downtown progression.</p>				
Other	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Franklin County Emergency Operations Plan 2021	County	Franklin County FCEM&HS
<p><i>How does this reduce risk?</i></p> <p>Addresses response for all hazards (man-made, technological, and natural) This document protects, mitigates, responds, and prevents all disasters.</p>				
Continuity of Operations Plan	We will have adopted plan mid-2023	Franklin county COOP/COG	County	Franklin County FCEM&HS
<p><i>How does this reduce risk?</i></p> <p>Gives the County a backbone and plan to resume operations if main building were to be uninhabitable.</p>				
Strategic Recovery Planning Report	Yes	Economic Development Strategic Plan. May 2019	County	EDP
<p><i>How does this reduce risk?</i></p> <p>Creates a strategic method to respond in a timely and safe manner, while getting the community back to its normal operations.</p>				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Latest 2021 update	County	Franklin county FCEM&HS
<p><i>How does this reduce risk?</i></p> <p>Identifies risk and threats throughout the community and scales them, allowing for strategic planning based on specific hazards.</p>				
Post-Disaster Recovery Plan	Yes	Disaster Recovery Plan May 2017	County	Franklin County FCEM&HS
<p><i>How does this reduce risk?</i></p> <p>Intended to be a pre-disaster recovery planning document as well as a guide for post-disaster recovery procedures.</p>				
Public Health Plan	Yes	Franklin County Strategic Plan 2019- 2023	County	Franklin County Public Health
<p><i>How does this reduce risk?</i></p> <p>Aligning individual staff goals with the strategic plan.</p>				
Other	No	-	-	-
<p><i>How does this reduce risk?</i></p>				

Development and Permitting Capability

The table below summarizes the capabilities of Franklin County to oversee and track development.

Table 9.1-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	EDP through the online permit center or the County Building Department.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	EDP requires the completion of an NFIP permit for new development.
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Franklin County and their current responsibilities that contribute to hazard mitigation.

Table 9.1-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Planning Commission—Responsible for approving major subdivisions and making recommendations on rezonings. Staffed by EDP
Zoning Board of Adjustment	Yes	Board of Zoning Appeals—Responsible for approving variances and conditional uses. Staffed by EDP
Planning Department	Yes	Responsible for administering zoning, subdivision, and floodplain regulations
Mitigation Planning Committee	No	FCEM&HS and Columbus Public Health Planning Teams/Franklin County Public Health
Environmental Board/Commission	Yes	Franklin County Environmental Court
Open Space Board/Committee	Yes	Columbus Department of Development Administration
Economic Development Commission/Committee	Yes	Economic Development and Planning
Public Works/Highway Department	Yes	ODOT/Traffic management
Construction/Building/Code Enforcement Department	Yes	Ohio Board of Building standards
Emergency Management/Public Safety Department	Yes	FCEM&HS
Warning Systems/ Services (mass notification system, outdoor warning signals, etc.)	Yes	Everbridge, emergency alert systems, 196 tornado sirens
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Columbus Department of Public Utilities
Mutual aid agreements	Yes	FCEM&HS

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Human Resources Manual	Yes	Franklin County Human Resources, 373 S High St
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	County Engineer; EDP
Engineers or professionals trained in building or infrastructure construction practices	Yes	County Engineer
Planners or engineers with an understanding of natural hazards	Yes	FCEM&HS Staff
Staff with expertise or training in benefit/cost analysis	Yes	FCEM&HS Staff
Professionals trained in conducting damage assessments	Yes	FCEM&HS Staff
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Auditors, Data Center, GIS Specialist at FCEM&HS office
Environmental scientist familiar with natural hazards	Yes	Ohio State Byrd Climate Research Center
Surveyor(s)	Yes	Franklin County Engineer Office
Emergency Manager	Yes	14 staffed personnel, specific roles to mitigate all hazards.
Grant writer(s)	Yes	various departments in the County
Resilience Officer	Yes	County has a climate resiliency officer with Sustainable Columbus
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to Franklin County.

Table 9.1-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Franklin County.

Table 9.1-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Public information officer (PIO) staffed at FCEM&HS
Personnel skilled or trained in website development	Yes	See above
Hazard mitigation information available on your website	Yes	Under the planning tab on emergency management site
Social media for hazard mitigation education and outreach	Yes	Social media run by PIO
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Tetra Tech community questionnaires
Warning systems for hazard events	Yes	Outdoor sirens run by Warning Systems manager
Natural disaster/safety programs in place for schools	Yes	Ohio School Safety Center, Ohio Administrative Code 4501
Does the jurisdiction have any public outreach mechanisms/ programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Volunteer groups for community members to be active in community resilience. CERT, VIPS. Trainings for the public hosted by Franklin County agencies.

Community Classifications

The table below summarizes classifications for community programs available to Franklin County.

Table 9.1-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 3	2018
Storm Ready Certification	Yes – Franklin County	-	-
Firewise Communities Classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.1-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.1.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning Team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Franklin County.

Table 9.1-9. NFIP Summary

Jurisdiction	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Unincorporated Franklin County	323	12	\$83,867.09	21	1
Franklin County (Total)	1,659	1,260	\$7,489,652.19	102	4

Sources: a. BureauNet 2023 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b. State of Ohio 2023

Notes: Due to a contractual agreement with FFC&HS, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FFC&HS's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Franklin County.

Table 9.1-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Evaluate the cost of repairs vs. the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	Some properties have been acquired through HMGP; County Engineer's office handled project in Whims Ditch area, and Prairie Township had a project.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No, the most recent map update in 2007 did not include new analysis of streams.
NFIP Compliance	
What local department is responsible for floodplain management?	EDP
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	Unknown at the time of the plan update
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Evaluate cost of improvements and current value of structure
What are the barriers to running an effective NFIP program in the community, if any?	None at the time of the plan update
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	None at the time of the plan update
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Franklin County Special Resolution NFIP Regulation, original adoption September 26, 1978, amended and readopted September 19, 2007
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Yes, freeboard requirement

NFIP Topic	Comments
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Floodplain management is administered by EDP, which also administers County zoning and subdivision regulations.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.1.5 Growth/Development Trends

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

The tables below summarize the number of building permits issued for new construction and recent and expected future development trends, including major residential/commercial development and major infrastructure development.

*Table 9.1-11. Number of Building Permits for New Construction Since the Previous HMP**

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	267	0	279	0	228	0	317	0	258 (YTD 12.8.22)	0
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	267	0	279	0	228	0	317	0	258 (YTD 12.8.22)	0

SFHA Special Flood Hazard Area (1% annual chance flood event)

Table 9.1-12. Recent Major Development from 2018 to Present

Property or Development Name	Type (e.g. Res., Comm.)	# of Units/ Structures	Address and/or Parcel ID	Municipality	Known Hazard Zone(s)	Description/ Status of Development
Villages at Jefferson Run Phase 1 Final Plat	Subdivision—Residential	16	171-000966	Jefferson	Inland Erosion	CLOSED
Villages at Jefferson Run Phase 6	Subdivision—Residential	36	171-000029	Jefferson	Inland Erosion	CLOSED
Morrison Farms East Section 3 Final Plat	Subdivision—Residential	42	171-000587	Jefferson	None Identified	CLOSED
Morrison Farms East Section 4 Final Plat	Subdivision—Residential	50	171-000587	Jefferson	None Identified	CLOSED

Property or Development Name	Type (e.g. Res., Comm.)	# of Units/ Structures	Address and/or Parcel ID	Municipality	Known Hazard Zone(s)	Description/ Status of Development
Morrison Farms East Phase 5	Subdivision—Residential	37	171-000587	Jefferson	None Identified	CLOSED
Morrison Farms East Phase 6	Subdivision—Residential	32	171-000587	Jefferson	None Identified	PENDING
Weldon Phase 2 Final Plat	Subdivision—Residential	40	170-000010	Jefferson	None Identified	CLOSED
Woodland Creek Final Plat	Subdivision—Residential	31	170-000074	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 1	Subdivision—Residential	48	170-000179	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 2	Subdivision—Residential	53	170-000238	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 3	Subdivision—Residential	44	170-000179	Jefferson	None Identified	CLOSED
Final plat for the Farms at Jefferson Phase 4	Subdivision—Residential	26	170-000238	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 5	Subdivision—Residential	48	170-000179	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 6	Subdivision—Residential	41	170-000238	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 7	Subdivision—Residential	37	170-000179	Jefferson	None Identified	CLOSED
The Farms at Jefferson—Phase 8	Subdivision—Residential	58	170-000179	Jefferson	None Identified	CLOSED
Farms at Jefferson Phase 9 Final Plat	Subdivision—Residential	37	170-000179	Jefferson	None Identified	WAITING FOR RECORDING
Final plat for Heritage Estates	Subdivision—Residential	7	120-000201	Brown	None Identified	CLOSED
Country Club Estates	Subdivision—Residential	6	230-001637	Pleasant	None Identified	CLOSED
Courtyards at Riverside Phase 2 final plat	Subdivision—Residential	50	212-000024	Perry	None Identified	WAITING FOR RECORDING
Courtyards on Riverside—Phase 1 replat	Subdivision—Residential	10	212-001360	Perry	None Identified	CLOSED
Briarfield Subdivision—FINAL PLAT	Subdivision—Residential	42	170-000086	Jefferson	None Identified	WAITING FOR RECORDING

Table 9.1-13. Known or Anticipated Major Development in the Next Five Years

Property or Development Name	Type (e.g. Res., Comm.)	# of Units/ Structures	Address and/or Parcel ID	Municipality	Known Hazard Zone(s)	Description/Status of Development
Villages at Galloway	Mixed Use	94	240-000112	Prairie	Inland Erosion, Land Subsidence	PENDING FINAL PLAT
Estates at Albany Acres preliminary plan	Subdivision—Residential	12	220-000437	Plain	None Identified	PENDING FINAL PLAT
Pegasus Estates	Subdivision—Residential	7	160-000041	Jackson	None Identified	PENDING FINAL PLAT
Zuber Road 9 lot subdivision preliminary plan	Subdivision—Residential	9	160-000032	Jackson	Land Subsidence	PENDING FINAL PLAT
Zubkevych Village—Preliminary Plan	Subdivision—Residential	6	230-003253	Pleasant	Land Subsidence	PENDING FINAL PLAT
Jefferson Manor subdivision	Subdivision—Residential	38	170-000008	Jefferson	None Identified	PENDING FINAL PLAT
Headley Heights	Subdivision—Residential	7	170-001853	Jefferson	None Identified	PENDING
West Point Estate	Subdivision—Residential	7	230-001514	Pleasant	None Identified	PENDING
Jackson Estates	Subdivision—Residential	15	160-001411	Jackson	None Identified	PENDING

9.1.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Franklin County's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps are provided in the hazard profiles (Section 4.3) to illustrate the probable areas impacted within Franklin County. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. The maps also show the location of potential new development, where available.

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). Refer to Section 4.3 (Hazard Profiles) for information on hazard events impacting Franklin County.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts, and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Refer to Section 4.4 (Hazard Ranking) for countywide rankings of each hazard.

Critical Facilities and Community Lifelines

Critical facilities and community lifelines located in Franklin County are summarized in Section 3 (County Profile). Details on the potential hazard impacts on those facilities are found in Section 4.3 (Hazard Profiles).

Identified Problems

After review of Franklin County's hazard event history, hazard rankings, jurisdiction-specific vulnerabilities, hazard area extent and location, and current capabilities, Franklin County identified the following problems within its community:

- Franklin County's large population and being the home to the City of Columbus make any disease outbreak or pandemic event a major concern. During the Covid-19 pandemic, the County saw over 300,000 reported cases and 2,800 recorded deaths.
- During the Covid-19 pandemic, the County realized its lack of personal protective equipment (PPE) and of storage for such items. Additionally, record keeping was a challenge in the County, as it was receiving PPE but did not have a process in place for documenting donations and keeping an inventory.



- The County lacks a formal communication process between internal and external partners during disaster responses. This leads to miscommunication, outreach delays, and security concerns.
- While earthquakes are not a large problem in Franklin County, the Anne Champaign fault line runs underneath the western portion of Ohio and can create problems for Franklin County (e.g., power outages, infrastructure damage). The County does not have a plan in place that focuses on earthquake response.
- Flooding is one of the top hazards of concern for the County. In addition, Franklin County is home to multiple high hazard dams that have the potential to cause significant flood impacts if they were to fail. The dams include Griggs, Hoover, O'Shaughnessy, and Alum Creek.
- Franklin County has highway transportation routes within Special Flood Hazard Areas and dam inundation areas (for example, Highway 315 near Riverside Hospital). In the event of a dam break or flood, these roadways will become inundated and will not be accessible, impacting emergency response.
- Alerting and warning the population about flood prone areas and providing updates throughout the course of a flooding event will give citizens a better understanding of what transportation routes have added risk when driving. This will also give the population a better understanding of how to prepare for predicted flood events. Updated information on severe weather will help make sure that people who need groceries do not drive while a weather activity may be taking place.
- Franklin County is at risk of a variety of potential winter weather forms. Freezing rain in February 2022 caused level 2 snow emergencies through the County. Given how important the transportations routes are for food and goods, going to a level 3 emergency would be abnormal. This can be seen as a problem because of the risk that is elevated for citizens getting stuck on the highways and potentially stranded. It is never out of the question for Franklin County to be in a blizzard, causing traffic to be at dead stops for multiple hours, while having lower temperatures.
- Franklin County has experienced high temperatures (> 100°F). This leads to power outages across the County and creates health concerns for vulnerable populations and those without proper shelter. Temperatures are rising each year, and the County is seeing impacts on the power grid systems. Many cooling centers and shelters open up during these events; however, the County does not have a database that contains information on these shelters (location, resources available, etc.). This makes it difficult to inform the public about where to go during extreme heat events.
- Franklin County is susceptible to erosion and geological ground conditions that could create sinkholes. The northwestern, southwestern, and southeastern portions of Franklin County have most of the land identified as having the greater than 0.49 K factor soil threshold, which is based on erosion risk (refer to Section 4.3.7 for a description of K factor soils).
- Franklin County has a history of strong storms and heavy winds. Tornadoes are rare; however, they can cause significant damage across the County. The County currently has tornado sirens in place, and they are maintained weekly. The County also has mass notification systems in place and sends

out warnings to registered residents. However, the sirens do not cover the entire County, and not everyone is registered to receive mass notifications.

- Extreme heat affected Linden and North Linden neighborhoods during the June 2022 heat wave. Expansive urban infrastructure (parking lots) and insufficient greenery and street tree plantings exacerbated the issue.
- Aged electrical infrastructure and large trees can compromise the integrity of power lines during severe storm events, as noted during the June 2022 derecho. Trees need to be reported, trimmed, and re-planted in areas that avoid electrical infrastructure.
- Concrete barriers between Trabue Road and West Broad Street prohibit U-turns for first responders. Responders have to take alternative routes, some including railroad crossings, delaying response times.

9.1.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.1-14. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities.	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • ODNR	In progress	Yes		City of Hilliard
Reconnect 150 linear feet of Dysart Run to the floodplain and stabilize three sections of bank with severe erosion to reduce erosion and siltation	FCEM&HS • Franklin County Engineer's Office • City of Hilliard • Norwich Township • ODNR	Complete		restore a more natural hydrology to the stream	
Increase stormwater retention/detention features along waterways, such as Holcomb Ditch, to reduce and/or slow the flow of stormwater.	FCEM&HS • Franklin County Engineer's Office • City of Hilliard • Norwich Township • ODNR	In progress	Yes		City of Hilliard
Develop a plan and strategy to ensure residents with functional needs are properly cared for in an emergency.	FCEM&HS • Franklin County social service agencies	In progress- FCEM&HS has begun including functional needs populations into all emergency plans		yes	FCEMHS
Seek funding for backup generators for critical public buildings and infrastructure.	FCEM&HS • All 41 local jurisdictions	On-going		yes	Each county Jurisdiction
Develop comprehensive strategies to increase siren coverage for outdoor warning and to promote weather radios as a reliable means of indoor warning.	FCEM&HS • All 41 local jurisdictions	On-going		yes	FCEMHS Alerting and Warning
Acquire properties in Prairie Township that have historically been subject to repeated flooding.	FCEM&HS • Franklin County Engineer's Office • Prairie Township	Completed		acquisition of seven parcels and the removal of six homes along Tamara Avenue.	

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for lightning detection/warning systems for city parks and other outdoor recreation areas.	FCEM&HS • All 41 local jurisdictions	No progress			
Remove and/or chemically treat 5 percent of the invasive plant species each year within Franklin County, targeting areas of major concern, particularly those surrounding reservoirs. Though this will not eliminate them, it would be a start to control them if the areas that have been removed in previous years are maintained free of invasive species by once-a-year spraying.	Ohio Invasive Plants Council • Franklin County Soil and Water Conservation District • City of Columbus Watershed Management • Local Government and County Park Departments, ODOT, ODNR, Watershed Groups, Environmental Groups	No progress	No		
Develop inventories of at-risk infrastructure and prioritize preventive measures in areas vulnerable to natural hazards.	Local Jurisdiction water and sewer departments • Franklin County Engineer's Office • FCEM&HS	No progress			
Integrate the goals and action items from the Franklin County Mitigation Plan into existing and future land use planning documents and existing regulatory programs.	FCEM&HS • EDP • Mid-Ohio Regional Planning Commission	Yes			Franklin county Economic Development
Identify resources and take appropriate actions in order to mitigate the effects of the hazards identified in the Risk Assessment for Franklin County as they impact each Franklin County jurisdiction.	FCEM&HS • EDP • All 41 local jurisdiction	On-going through BRIC grants			

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Strengthen partnerships between government agencies and private sector businesses to develop public awareness of and involvement in natural hazard mitigation strategies.	FCEM&HS • American Electric Power • Private and public utility companies	In progress- Began conducting alerting and warning strategies with private sector companies in the need of mass notifications.	yes		FCEMHS
Develop and implement public education programs to increase public awareness and understanding of the risks associated with natural hazards.	FCEM&HS • Volunteer and Social Service organizations	In progress- FCEM&HS will post social media educational awareness tips given the month and weather hazard associated with the season.	Yes		FCEMHS
Involve watershed and natural resource management, and other interested parties, in natural hazard mitigation planning to rehabilitate and maintain streams and waterways.	FCEM&HS • Mid-Ohio Regional Planning Commission: Water Resource Working Group	On-going	Yes		
Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.	FCEM&HS • City of Bexley • City of Columbus • Franklin Township • City of Grove City • Madison Township • Pleasant Township • Prairie Township • Sharon Township • City of Upper Arlington • Washington Township • City of Westerville • City of Whitehall • City of Worthington	In progress- Begun surveying and reporting repetitive loss areas seeing if it is still occupied or not.	Yes		
Involve watershed and natural resource management, governmental land-owning agencies, and other interested parties, in natural hazard mitigation planning to control and eliminate invasive plant species.	Franklin County Soil and Water Conservation District • Ohio Invasive Plants Council • Local Government and County Park Departments, ODOT, ODNR, Watershed Groups, Environmental Groups	On going	Yes		Core Planning team for NHMP

Additional Mitigation Efforts

In addition to the mitigation initiatives completed in the table above, Franklin County identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, Franklin County has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013), Mitigation Assistance Resource Guide for Ohio (FEMA, August 2022), and Local Mitigation Planning Handbook (FEMA March 2013).

The table below indicates the mitigation action categories used to address each hazard of concern assessed in this HMP. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.1-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA Categories				CRS Categories					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X		X	X	X	X	X	X	X	X
Disease Outbreak	X	X		X	X		X			X
Drought	X		X	X	X		X			X
Earthquake	X			X	X		X			X
Extreme Temperature	X	X	X	X	X	X	X			X
Flood	X		X	X	X	X	X	X	X	X
Geologic	X	X	X	X	X		X	X	X	X
Invasive Species	X		X	X	X	X	X			X
Severe Summer Weather	X	X	X	X	X	X	X	X	X	X
Severe Winter Weather	X	X	X	X	X	X	X			X
Tornado	X		X	X	X	X	X			X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.1-16)

The table below summarizes the mitigation actions Franklin County will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.1-16. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Franklin County-001	PPE Stockpile and Storage	<p>Problem: Franklin County's large population and being the home to the City of Columbus make any disease outbreak or pandemic event a major concern. During the Covid-19 pandemic, the County saw over 300,000 reported cases and 2,800 recorded deaths. The County realized its lack of PPE and of storage for such items. Additionally, record keeping was a challenge in the County as they were receiving PPE but did not have a process in place for documenting donations and keeping an inventory.</p> <p>Solution: Franklin County will identify a central location to store and stockpile PPE. Once identified, the County will implement a process for creating an inventory of equipment and a tracking system to use when equipment leaves the facility. This will ensure the County is maintaining enough PPE before, during, and after a disease outbreak event.</p>	Disease Outbreak	Yes	2, 4, 5	Continuous/ongoing	FCEM&HS, external and private partners	FEMA HMGP, County Budget, Ohio Department of Health	Maintaining proper response to a countywide problem	\$1 million+	High	LPR, EAP, SIP	PI, ES
2023-Franklin County-002	Communication Protocols for Disaster Response	<p>Problem: The County lacks a formal communication process between internal and external partners during disaster responses. This leads to miscommunication, outreach delays, and security concerns.</p> <p>Solution: The County will develop a communication process between internal and external partners. The process will include roles, responsibilities, and required trainings for those involved in disaster response.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geological, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes	Yes	1, 2, 3, 4, 5, 6	Develop program – within two years; implement program – ongoing	FCEM&HS, external and private partners	FEMA HMGP, County Budget, Ohio Department of Health	Continuity of operations	\$50,000+	High	LPR, EAP	PI, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Franklin County-003	Continuity of Operations/Continuity of Governments Plan	<p>Problem: While earthquakes are not a large problem in Franklin County, the Anne Champaign fault line runs underneath the western portion of Ohio and can create problems for Franklin County (e.g., power outages, infrastructure damage). The County does not have a plan in place that focuses on earthquake response.</p> <p>Solution: The County will develop a continuity of operations/continuity of governments plan to implement a response in the event an earthquake causes power outages and/or disrupts critical infrastructure. This will allow the County to provide essential services to residents in the event of a large-scale power outage or major roadway closures.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geological, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes	Yes	2, 3	One year	FCEM&HS	BRIC funding	Continuous communications and working with the agency to continue emergency management functions	\$50,000+	High	LPR	PR
2023-Franklin County-004	Flood and Dam Failure Feasibility Study	<p>Problem: Flooding is one of the top hazards of concern for the County. In addition, Franklin County is home to multiple high hazard dams that have the potential to cause significant flood impacts if they were to fail. The dams include Griggs, Hoover, O'Shaughnessy, and Alum Creek. Franklin County has highway transportations routes within Special Flood Hazard Areas and dam inundation areas (Highway 315 near Riverside Hospital). In the event of a dam break or flood, these roadways will become inundated and will not be accessible, impacting emergency response.</p> <p>Solution: Identify weaknesses in the County's drainage systems, where they are located, and what measures are needed to address them. Provide redundancy within the County's critical infrastructure. Measures include:</p>	Dam/Levee Failure, Flood, Severe Summer Weather	Yes	1, 2, 4	Multiple years	Franklin County Sanitary Engineering, Columbus Public Utilities	FEMA BRIC, FMA, and HMGP, County Budget	The benefits would be less local flood damage to property and safer driving for crowded highways and roads. These actions would reduce risk to the highest risk hazard in the County.	\$250,000+	High	LPR, SIP, NSP	PR, SP, NR, PP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<ul style="list-style-type: none">Identifying weak spots on highways and all main roads that may be prone to hydroplaning or flooding.Maintaining a flood wall barrier in case of waterways breaching onto roads. This begins with developing a strategy to locate where those high water marks are.Partnering with stakeholders in each municipality to do a drive and check through their designated area to help the county prioritize where mitigation measures can be implemented.											
2023-Franklin County-005	Severe Weather Warning	<p>Problem: The County's current severe weather warning process is in need of updating. At this time, the County does not have an efficient way to inform the public about floodprone areas, flooding event updates, road closures, and other weather events. Alerting and warning systems would give the public a better outlook on how to prepare for the day. Updated information on severe weather will allow residents to make essential decisions before an event occurs.</p> <p>Solution: The first mitigation action would be to promote awareness and participation in the County alerting systems, FCReady. This would be done by working with local jurisdictions to promote and advertise the FCReady text messaging program, which is utilized by FCEM&HS. This can be done through radio calls, billboards or having a spot in the local paper detailing how to sign up and the benefits of doing so. FCReady is a keyword opt-in text messaging platform specific to hazards based on the keyword.</p>	Flood, Tornado, Severe Winter Weather, Severe Summer Weather, and Extreme Temperature	Yes	1, 2, 4, 5, 6	Multiple years	FCEM&HS	County Budget; FEMA HMGP	Safer community through hazard identification and announcements. Losses avoided will be big accidents requiring mass response and poor EOC communication. The County would have direct access to the NWS weather chat.	\$50,000	High	NSP, EAP	PI, ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Maintaining and advertising the NOAA storm ready program county wide will give communities in Franklin County a chance to receive timely updates through NWSchat. This program gives a one-on-one connection with the National Weather Service that could help determine predictions for storms, or let the County know if the EOC may be activated, as well as who would be a good source pre-event so the County can pre-plan for activating the EOC.											
2023-Franklin County-006	Winter Storm Alert and Warning System	<p>Problem: Franklin County is at risk of a variety of potential winter weather forms. The County has experienced Level 2 snow emergencies. This can create problems for commuters, those in need of emergency services, and essential personnel needing to go to work. It can create hazard situations for the County to respond to.</p> <p>Solution: Franklin County will work with its municipalities to ensure residents are aware of the warning systems in place and how to access them. FCEM&HS will make sure that an annual meeting is conducted, co-hosted with the sheriff, county engineer, county administration, state transportation (COTA) and the electric utility companies to update and discuss the Franklin County snow emergency plan. These are the partners that will work together to discuss response to a snow emergency. Alerting and warning all residents in a timely manner will lead to increased resilience and preparedness for winter weather events.</p>	Severe Winter Weather, Flood, and Extreme Temperature	Yes	2, 5, 6	Annually updated	FEMA and FCEM&HS	FEMA HMGP, County Budget	Risk reduction, citizen safety	\$25,000	High	EAP	PI, ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Franklin County-007	Extreme Temperature Response Procedures	<p>Problem: Franklin County has experienced high temperatures (>100°F). This leads to power outages across the County and creates health concerns for vulnerable populations and those without proper shelter. Temperatures are rising each year and the County is seeing impacts on the power grid systems. Many cooling centers and shelters open up during these events; however, the County does not have a database that contains information on these shelters (location, resources available, etc.). This makes it difficult to inform the public about where to go during extreme heat events.</p> <p>Solution: Franklin County will develop and implement response procedures for extreme temperature events. First, the County will develop a partnership with private sector utility/energy companies to implement public messaging regarding energy conservation. The County will rely on the utility companies to send out messages when power dFCEM&HSnd spikes during extreme heat events. Second, the County will identify heating/cooling centers in locations throughout the County. A database will be created that will contain the location, capacity, and services available. To identify the centers, the County will map public-owned facilities suitable for such centers and sign a memorandum of understanding between the County and facility owners.</p>	Severe Summer Weather, Severe Winter Weather, Extreme Temperature	Yes	2, 3, 5	2 years	FCEM&HS and CPH/FCPH; coordination with facility owners	FEMA BRIC and HMGP, County Budget	Public education/private sector relationship/ safer health	\$25,000+	High	LPR, SIP, EAP	PR, PI, ES
2023-Franklin County-008	Geological Hazard Feasibility Study	<p>Problem: Franklin County is susceptible to erosion and geological ground conditions that could create sinkholes. The northwestern, southwestern, and southeastern portions of Franklin County have most of the land</p>	Geologic	Yes	1, 2, 3, 5, 6	Annually	FCEM&HS and Franklin County Soil and water conservation	County Budget	Concise location of geological losses. Gives time to prepare and mitigate for the hazard at hand. Potential land	\$25,000+	Medium	LPR, SIP, NSP, EAP	PR, PI, ES, NR, SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		identified as having the greater than .49 K factor threshold, based on erosion risk. Solution: The County will complete a feasibility study to identify areas in the County vulnerable to geological hazards (e.g., erosion, landslides, sinkholes). The study will also determine mitigation measures to protect critical facilities and lifelines vulnerable to such hazards. Once the study is complete, the County will seek funding to implement projects identified. The study will be updated each year to ensure it is current and addresses new development in the County.							buyouts if needed, depending on the damage potential. Preserves property and life safety.				
2023-Franklin County-009	Update Warning Technology for Weather Events	Problem: Franklin County has a history of strong storms and heavy winds. Tornadoes are rare; however, they can cause significant damage across the County. The County currently has tornado sirens in place, and they are maintained weekly. The County also has mass notification systems in place and sends out warnings to registered residents. However, the sirens do not cover the entire County and not everyone is registered to receive mass notifications. Solution: The County will purchase and install proper emergency warning technology to inform the public of severe weather events. This will include: <ul style="list-style-type: none">Installing outdoor tornado sirens in areas that currently do not have warning systems in place.Installing solar-powered sirens in the County that provide non-rotating 360-degree sound siren.	Severe Summer Weather, Tornado	Yes	1, 2, 4, 6	Multiple Years	FCEM&HS	FEMA BRIC and HMGP	Better public alerting and warning with the potential for fewer siren setbacks. Improves the function and confidence in public alerting.	\$250,000+	High	LPR, EAP	PI, ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Critical Facility/Community Lifeline?	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<ul style="list-style-type: none">Upgrade existing analog siren activation technology, reducing the vulnerability to intrusion and false activation by others. (Digital P-25 or LTE technology).Develop an outreach program to inform residents and the public about the different siren warnings and how to register for mass notifications.											
2023-Franklin County-010	Tree Maintenance Program	<p>Problem: Aged electrical infrastructure and large trees can compromise the integrity of power lines during severe storm events, as noted during the June 2022 derecho. Trees need to be reported, trimmed, and re-planted in areas that avoid electrical infrastructure.</p> <p>Solution: The County will explore options for trimming and removal of high hazard trees that have been damaged or killed by diseases or storm events. The first phase of the project will involve the survey of trees in the County, on county-owned property, to determine which trees have been impacted by disease or storm events. The County will then work to remove trees by partnering with outside agencies such as utility providers and/or hiring contractors to remove the high hazard trees.</p>	Drought, Extreme Temperature, Flood, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes	Yes	1, 2, 4, 6	Two years	Franklin County Engineer's Office, Franklin County Highway Maintenance, and local jurisdictions	FEMA HMGP and BRIC, County budget	Reduction in damages from falling trees; reduce duration or occurrence of power outages; provide protection to critical infrastructure and community lifelines from tree damage	>\$25,000	High	LPR, NSP	PP, ES

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.

Potential FEMA/HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative, or regulatory actions or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and stormwater management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation initiatives. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.1-17. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High/Medium/Low
2023-Franklin County-001	PPE Stockpile and Storage	1	1	1	1	1	1	0	0	1	1	0	1	0	0	9	High
2023-Franklin County-002	Communication Protocols for Disaster Response	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
2023-Franklin County-003	Continuity of Operations/Continuity of Governments Plan	1	1	1	1	1	1	0	0	0	1	1	1	0	0	9	High
2023-Franklin County-004	Flood and Dam Failure Feasibility Study	1	1	1	1	1	1	0	0	0	1	1	1	0	0	9	High
2023-Franklin County-005	Severe Weather Warning	1	1	1	1	1	1	0	0	1	1	1	1	0	0	10	High
2023-Franklin County-006	Winter Storm Alert and Warning System	1	1	1	1	1	1	1	0	1	1	0	1	0	0	10	High
2023-Franklin County-007	Extreme Temperature Response Procedures	1	1	1	1	1	1	1	0	0	1	0	1	0	0	9	High
2023-Franklin County-008	Geological Hazard Feasibility Study	1	1	1	1	1	1	0	0	0	1	0	1	0	0	8	Medium
2023-Franklin County-009	Update Warning Technology for Weather Events	1	1	1	1	1	1	0	0	1	1	1	1	0	0	10	High
2023-Franklin County-010	Tree Maintenance Program	1	1	1	1	1	1	0	0	0	1	1	1	0	0	9	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.2 CITY OF BEXLEY

This section presents the jurisdictional annex for the City of Bexley that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Bexley participated in the planning process, an assessment of the City of Bexley's risk and vulnerability, the different capabilities used in the City of Bexley, and an action plan that will be implemented to achieve a more resilient community.

9.2.1 Hazard Mitigation Planning Team

The City of Bexley identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Bexley departments, including the Lieutenant. The Lieutenant represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.2-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Dawn Overly/Lieutenant	Name/Title:	Ben Kessler, Mayor
Address:	559 North Cassingham Road Bexley Ohio 43209	Address:	2242 East Main Street Bexley, Ohio 43209
Phone Number:	614-559-4444	Phone Number:	614-559-4200
Email:	DOverly@bexley.org	Email:	bkessler@bexley.org
NFIP Floodplain Administrator			
Name/Title:	Andy Bashore, Assistant Service Director		
Address:	2242 E. Main Street		
Phone Number:	614-559-4220		
Email:	abashore@bexley.org		
Additional Contributors:			
Name/Title:		No additional contributors	
Method of Participation:			

9.2.2 Municipal Profile

The City of Bexley is located on the banks of Alum Creek in the center of Franklin County. Bexley is one of Columbus' closest suburb, located 3.8 miles directly east from the center of the City of Columbus. Whitehall borders the city to its east and Hanford to the southwest.

According to the American Community Survey, the 2021 population for the City of Bexley was 13,820, a 5.84 percent increase from the 2010 Census population of 13,057. Data from the 2021 U.S. American Community Survey indicates that 6.3 percent of the population is 5 years of age or younger and 13.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.2.3 Jurisdictional Capability Assessment and Integration

The City of Bexley performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities :

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Bexley to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Bexley and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.2-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Building and Housing Code Part 14	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following:</p> <p>(a) Performance. Establish such requirements, in terms of performance objectives for the use intended.</p> <p>(b) Extent of Use. Permit to the fullest extent feasible the use of materials and technical methods, devices, and improvements which tend to reduce the cost of construction without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction.</p> <p>(c) Standardization. Encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units.</p>				
Zoning/Land Use Code	Yes	Planning and Zoning Code Part 12, Title 4	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>The zoning regulations have been made in accordance with the Comprehensive Zoning Plan in the interest of the protection and promotion of the public health, safety, and welfare of the residents.</p>				
Subdivision Ordinance	Yes	Planning and Zoning Code Part 12, Title 3	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>This ordinance describes design and performance standards for all subdivisions within the City.</p>				
Site Plan Ordinance	Yes	Bexley Codified Ordinance 1258.09	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>Defines drainage and setback requirements. Mitigates flooding and fire concerns.</p>				
Stormwater Management Ordinance	Yes	Bexley Codified Ordinance 1250/1044/1490	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>Flood mitigation ordinance. Slated for update</p>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Real Estate Disclosure	Yes	4537.58	4537.58	4537.58
<p><i>How does this reduce risk?</i></p> <p>Reduces risk by disclosing environmental problems with property and land. Identify potential hazards: mold, radon, and flooding.</p>				
Growth Management	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Environmental Protection Ordinance	Yes	Bexley Codified Ordinance 1258/1490/285	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>Establishes requirements of environmental protection in steep slopes, waterways, and floodplains.</p>				
Flood Damage Prevention Ordinance	Yes	Bexley Codified Ordinance 1444.01	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>Identifies risk prior to incident.</p>				
Wellhead Protection	No	-	-	-
<p><i>How does this reduce risk?</i></p>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Emergency Management Ordinance	Yes	Bexley Codified Ordinance 260	Local	Mayor's Office
<i>How does this reduce risk?</i> Provides for the Mayor's Emergency Powers during an emergency.				
Climate Change Ordinance	Under Development	Race to Zero Action Plan	Local	Mayor's Office
<i>How does this reduce risk?</i> Addresses causes of air pollution emissions within the City.				
Other	Yes	Historic Preservation Ordinance	Local	Building Dept.
<i>How does this reduce risk?</i>				
Planning Documents				
Comprehensive/Master Plan	Yes	Bexley Land Use Strategy Bexley Strategic Plan	Local	Mayor's Office
<i>How does this reduce risk?</i> This plan helps to identify potential risk, creates standards and accountability.				
Capital Improvement Plan	Yes	Water/Sewers/Streets	Local	Mayor's Office
<i>How does this reduce risk?</i> This plan helps to identify potential risk, creates standards and accountability.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	Bexley Codified Ordinance	Local	Building Dept./Mayor's Office
<i>How does this reduce risk?</i> Identifies risk early.				
Stormwater Management Plan	No	-	State	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	State	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	Yes	Land use strategy, SW Bexley strategy framework, Joint Livingston Avenue Plan	Local	Building Dept., Code Enforcement, Council
<i>How does this reduce risk?</i> This strategy helps address challenges facing the city, and identifies strategic priorities for the various districts—both residential and commercial—in Bexley.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Community Forest Management Plan	Under Development	Comprehensive park plan focus on preservation and enhancement.	Local	Recreation and Parks Dept.
<i>How does this reduce risk?</i> Sustainable management, rehabilitation and protection of forest area and resources.				
Transportation Plan	Yes	Bike Friendly Bexley, Safe Routes to School Plan, Link US, Cota Plan	Local, State, County	Service Dept., Mayor's Office
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	Under Development – Zero Waste Plan	Sustainability Plan	Local	Environmental Sustainability Advisory Committee
<i>How does this reduce risk?</i> The Plan develops recommendations for addressing energy and sustainability issues to advance the City.				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	Yes	Land Use Strategy	Local	Building Dept./Mayor's Office
<i>How does this reduce risk?</i> Minimizes development in areas where the likelihood of hazard impact is high.				
Other	-	-	-	-
<i>How does this reduce risk?</i>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Under Development	Emergency Response Planning	Local	Emergency Management
<i>How does this reduce risk?</i> Emergency planning and preparedness efforts. Planning, preparation, response, and recovery for natural or manmade disasters.				
Continuity of Operations Plan	Under Development	Mission Essential Functions continue to be performed.	Local	Emergency Management
<i>How does this reduce risk?</i> Identifies essential functions that must continue to be performed as response and mitigation efforts				
Strategic Recovery Planning Report	No			
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	Under Development	THIRA Plan	Local	Emergency Management
<i>How does this reduce risk?</i> Identifies potential risk within city.				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	Yes	Public Health Policy	Local, County	Mayor's Office
<i>How does this reduce risk?</i> Educational announcements – early detection – resources				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Other	-	-	-	-
How does this reduce risk?				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Bexley to oversee and track development.

Table 9.2-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe	Yes	Development Department– Land Use Strategy Plan – addressing short- and long-term planning options and land-use challenges
Describe the level of build-out in your jurisdiction.	N/A	

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Bexley and their current responsibilities that contribute to hazard mitigation.

Table 9.2-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	City of Bexley Board of Zoning and Planning
Zoning Board of Adjustment	Yes	City of Bexley Board of Zoning and Planning
Planning Department	Yes	City of Bexley Board of Zoning and Planning
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Environmental Sustainability Advisory Committee
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	City of Bexley Development Department
Public Works/Highway Department	Yes	City of Bexley Service Department
Construction/Building/Code Enforcement Department	Yes	City of Bexley Building Department/Code Enforcement
Emergency Management/Public Safety Department	Yes	Bexley Police Department Emergency Management (EM) Lieutenant
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	FCEMA, BexAlert system – EM Lieutenant/Mayor's office
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	City of Bexley Water Department
Mutual aid agreements	Yes	City of Bexley Police Department, Service Department

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Human Resources Manual	Yes	Mayor's Office
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Building Dept.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building Dept. /Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Koch Engineering Group
Staff with expertise or training in benefit/cost analysis	Yes	City of Bexley Finance Department
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	Bexley Police Department - EM Lieutenant
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	-	-
How do your administrative/technical capabilities contribute to risk reduction in your community? Through community education – developing plans to reduce risk		

Fiscal Capability

The table below summarizes financial resources available to the City of Bexley.

Table 9.2-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	N/A
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Bexley.

Table 9.2-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Education/outreach programs conducted by Green Bexley, Bexley Police Department
Personnel skilled or trained in website development	Yes	Mayor's office
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Mayor's Office Social Media, EM Facebook
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Community Improvement Board, Environmental Sustainability Committee
Warning systems for hazard events	Yes	BexAlert
Natural disaster/safety programs in place for schools	Under Development	School District, EM Lieutenant,
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Under Development	Community workshops are being planned to educate community.

Community Classifications

The table below summarizes classifications for community programs available to the City of Bexley.

Table 9.2-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	N/A	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	N/A	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.2-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Strong
Severe Summer Weather	Strong
Severe Winter Weather	Strong
Tornado	Moderate

9.2.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Bexley.

Table 9.2-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Bexley (C)	14	23	\$48,583.61	3	0

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Bexley.

Table 9.2-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Yes – basement flooding
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	Yes – 195 mitigation elevation (basement flooding)

NFIP Topic	Comments
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway.	No
• How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction?	Evaluate the cost of repairs vs. the pre-damaged value of structure. No substantial damage determinations made recently
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Unknown
NFIP Compliance	
What local department is responsible for floodplain management?	Building Department and Service Department
Are any certified floodplain managers on staff in your jurisdiction?	Contracted Franklin County Soil and Water Conservation District
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes – Franklin County Soil and Water Conservation District and Mid-Ohio Regional Planning Commission
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Consult with Franklin County Soil and Water Conservation District; consult with FEMA floodplain maps
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Based on overall size – riparian setback
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	None known
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2018 EF-1 Tornado
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	1444 Flood Damage Prevention
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Exceeds – Alum Creek Riparian setback
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Unsure

9.2.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

*Table 9.2-11. Number of Building Permits for New Construction Since the Previous HMP**

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.2-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
424 South Columbia Avenue	Residential	1	424 South Columbia Avenue	None	New build
2106 East Main Street	Commercial	1	2106 East Main Street	None	Bank
2010 East Broad Street	Commercial	1	2010 East Broad Street	None	Gymnasium, Convocation center
202 South Columbia Avenue	Residential	1	202 South Columbia Avenue	None	New build
394 South Columbia Avenue	Residential	1	394 South Columbia Avenue	None	New build
407 Northview Drive	Residential	1	407 Northview Drive	None	New build
221 Ashbourne Road	Residential	1	221 Ashbourne Road	None	New build
261 South Columbia Avenue	Residential	1	261 South Columbia Avenue	None	New build
280 South Columbia Avenue	Residential	1	280 South Columbia Avenue	None	New build
Known or Anticipated Major Development in the Next Five (5) Years					
2199 East Main Street	Residential/Commercial	1	2199 East Main Street	None	Demolish, new build

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.2.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Bexley's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which the City of Bexley has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.2-1. City of Bexley Hazard Area Extent and Location Map-Flood

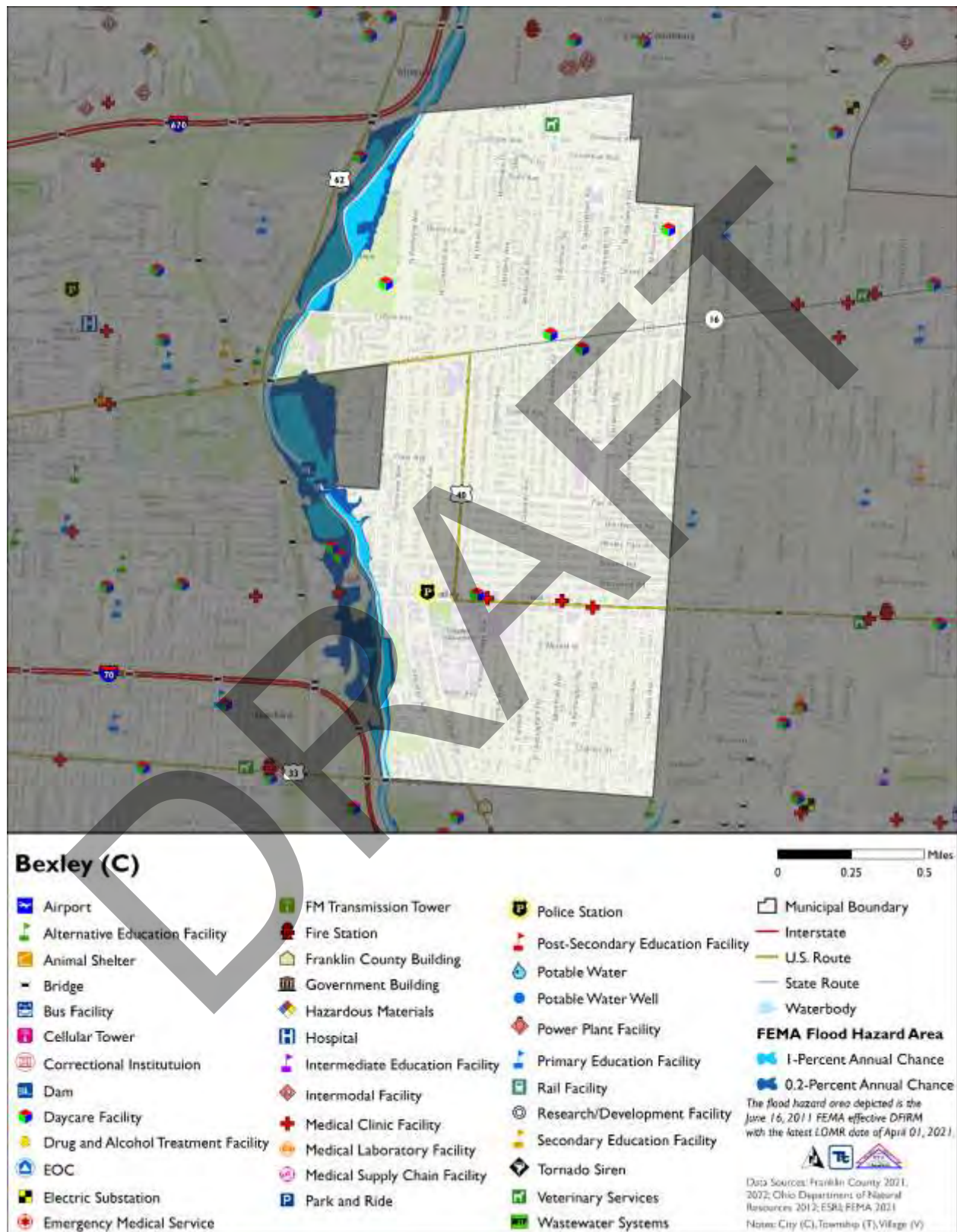


Figure 9.2-2. City of Bexley Hazard Area Extent and Location Map-Inland Erosion

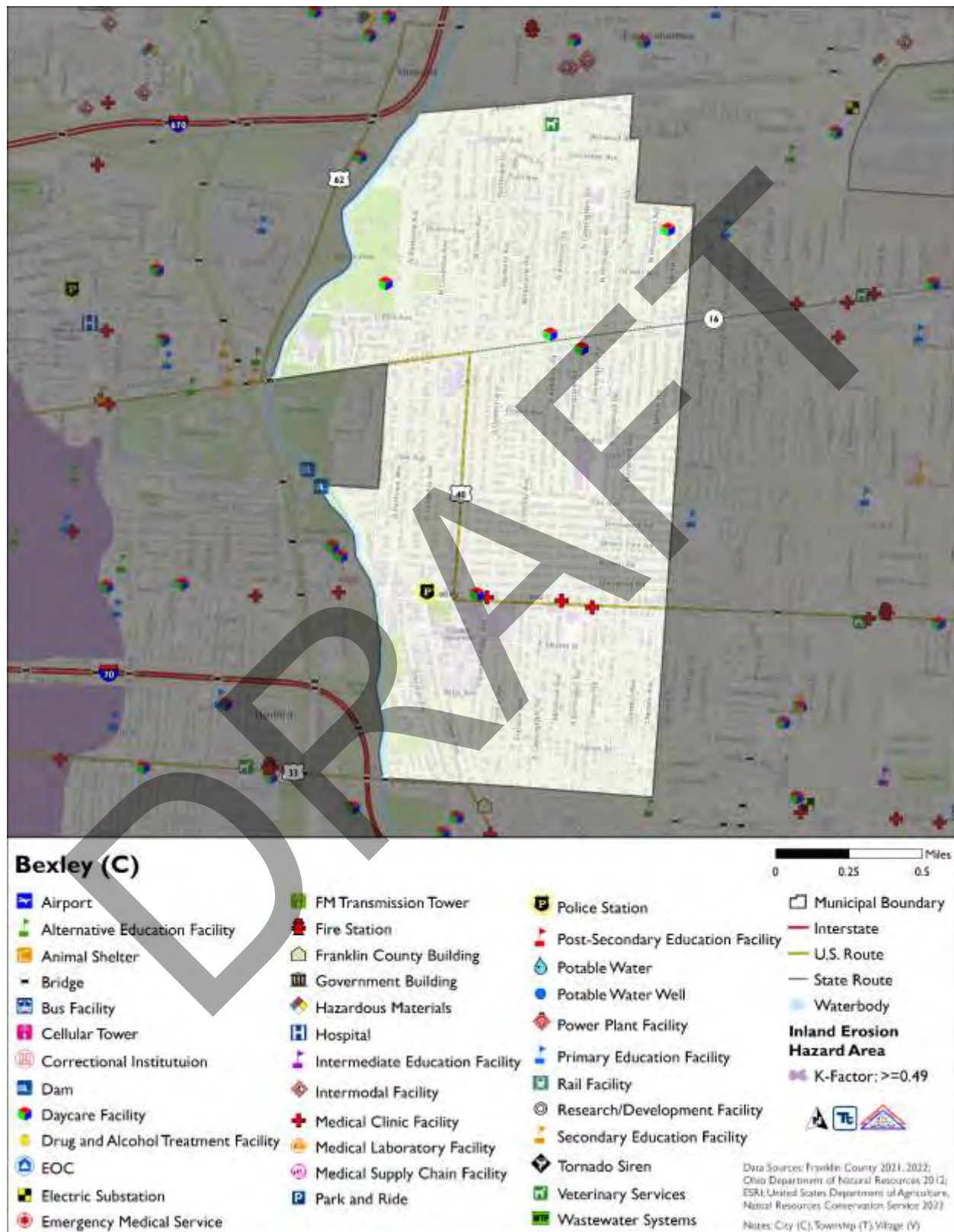
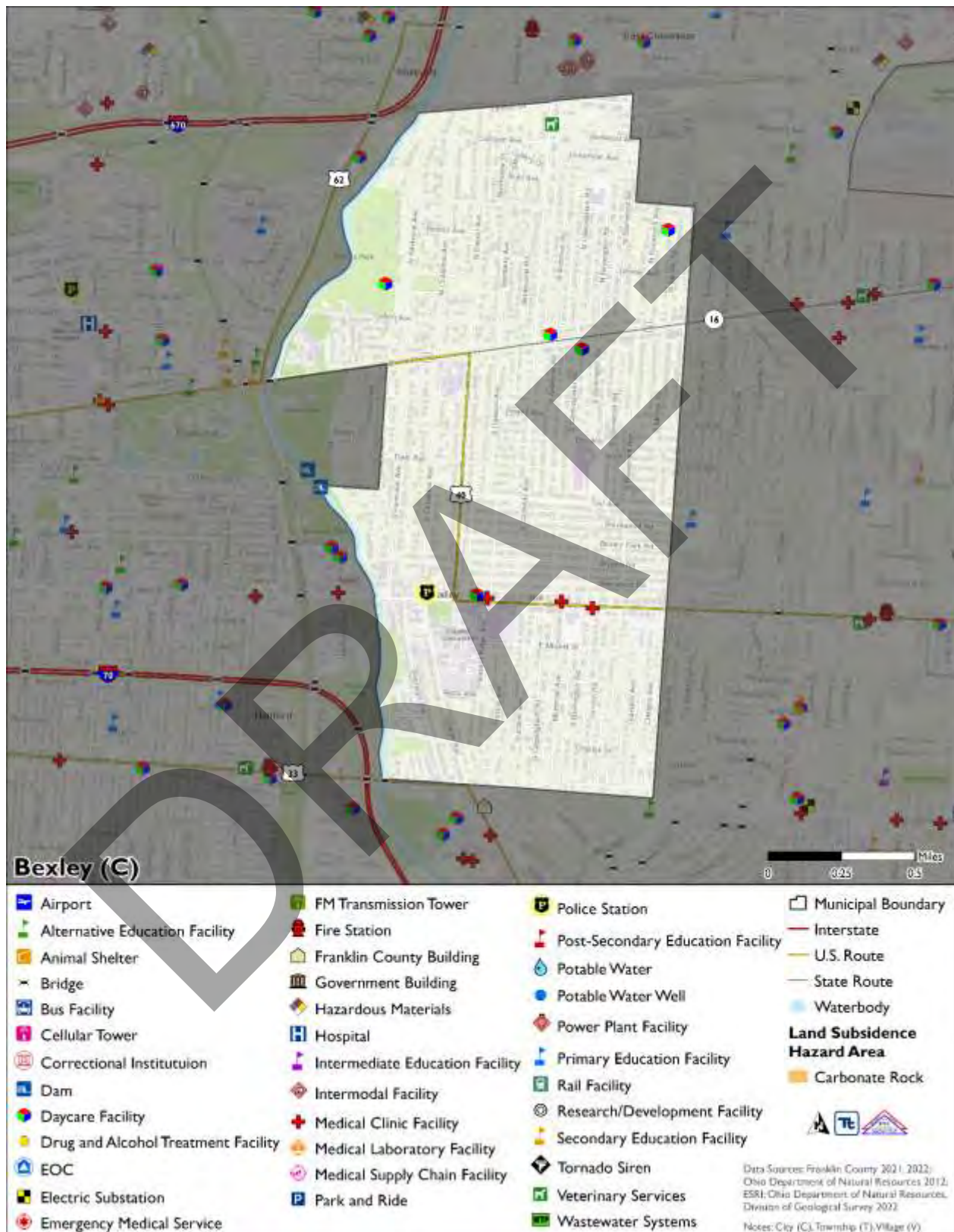


Figure 9.2-3. City of Bexley Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Bexley's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Bexley experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.2-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damage and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Trees and power lines down – debris clean-up completed in-house.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City did not experience any notable damage or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, Fort Bend County had 347,221 reported cases and 2,721 reported deaths.	The City did not experience any notable damage or losses.

Hazard Ranking

This section provides the community-specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Bexley. The

City of Bexley reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Bexley agreed with all of the following hazard risk rankings.

Table 9.2-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

DRAFT

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.2-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Bexley

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	—	—
Subsidence (Karst/Carbonate Rock) Hazard Area	—	—
Alum Creek Dam Inundation (MH Breach) Hazard Area	2	2
Delaware Dam Inundation (MH Breach) Hazard Area	1	1

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- The City sewer system becomes backed up during high-volume precipitation events, which is leading to flooded basements throughout the City.
- The City's residents are unaware of how to prepare for and mitigate the hazards that affect Franklin County.
- The City currently does not have a system in place to identify socially vulnerable populations in the municipality. The City has determined that many residents that fall within this category do not have technology in place that allows them to receive mass notifications from the City. This makes it difficult to reach out and provide necessary goods and services to them before, during or after a hazard event.
- Private residential houses contribute large amounts of groundwater into the sanitary system. Illegal stormwater connections through downspouts, floor drains, sump pumps and yard drains overcome the capacity of the sanitary system, causing discharge into residents' homes. This hazard covers the 2.5 square miles of the City of Bexley. Bexley's high-water table does contribute to the problem.
- The City of Bexley has three repetitive loss properties. Many of these structures were built with limited flood design standards. These properties require mitigation to prevent future loss of life and property damage.
- The City of Bexley does not have a disaster debris management plan to establish guidelines for managing debris from disasters.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.2.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.2-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Research and determine cause of overall flooding in Bexley. (100,000/ 1 year)	Service Department	No Progress	No	Not able to locate status of project	-
Seek funding to address core problems of flooding with permanent solutions	Service Department	No Progress	Yes	Not able to locate status of project	Service Department
Seek funding for repetitive loss structures to permanently reduce damage to these structures. (3 known properties est. at \$925,000 / 2 years)	Mayor's Office	No Progress	No	Not able to locate status of project	-
Seek funding for backup generators for critical public buildings. (10 buildings @ \$500,000 / 6 months)	Mayor's Office	No Progress	No	Not able to locate status of project	-
Seek funding for lightning detection and warning for city parks. (\$100,000 / 1 year)	Mayor's Office	No Progress	No	Not able to locate status of project	-
Work with Franklin County Emergency Management and Homeland Security to develop public educational outreach regarding all natural hazards and Franklin County's susceptibility to those hazards and make available on Bexley's website. (No costs, ongoing)	Mayor's Office	No Progress	Yes	Not able to locate status of project	Mayor's Office

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Bexley identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Bexley has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Bexley participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.2-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	-	-	X	-	-	X
Disease Outbreak	-	X	X	X	-	-	X	X	X	X
Drought	-	-	-	X	-	-	X	-	-	X
Earthquake	X	-	-	X	-	-	X	-	-	X
Extreme Temp	-	-	-	X	-	-	X	-	-	X
Flood	X	X	X	X	-	X	X	X	X	X
Geologic	X	X	X	X	-	-	X	X	X	X
Invasive Species	X	-	-	X	-	-	X	-	-	X
Severe Summer Weather	X	X	X	X	-	X	X	X	X	X
Severe Winter Weather	X	X	-	X	-	X	X	-	X	X
Tornado	X	-	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.2-18).

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Bexley will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.2-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Bexley-001	Upgrade Sewer System*	Problem: The City sewer system becomes backed up during high volume precipitation events, which is leading to flooded basements throughout the City. Solution: The City will seek funding to address core problems of sewer systems flooding by conducting a study to implement permanent solutions.	Flood, Severe Weather, Severe Winter Weather	2	Less than 5 years	City of Bexley, Community Improvement Corporation, Development Department	FMA, BRIC, HMGP	Reduces repetitive flooding after an intense precipitation event.	> \$100,000	High	SIP	PP, SP
2023-City of Bexley-002	Public Education and Outreach	Problem: The City's residents are unaware of how to prepare for and mitigate the hazards that affect Franklin County. Solution: Work with Franklin County Emergency Management and Homeland Security to develop public educational outreach regarding all natural hazards and Franklin County's susceptibility to those hazards and make available on Bexley's website. (No costs, ongoing)	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Weather, Severe Winter Weather, Tornado	4, 5	1 Year	City of Bexley, Franklin County Emergency Management and Homeland Security	City and County Budget	Educates the public on hazards that affect the County and instructs them on how to prepare.	< \$3,000	High	EAP	PI
2023-City of Bexley-003	Develop Registry for At-Need Populations	Problem: The City currently does not have a system in place to identify at-need populations in the municipality. The City has determined that many residents that fall within this category do not have technology in place that allows them to receive mass notifications from the City. This makes it difficult to reach out and provide necessary goods and services to them before, during, or after a hazard event.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Weather, Severe Winter Weather, Tornado	4	1 Year	City of Bexley, Franklin County Emergency Management	City and County Budget	The at-need population will be better protected from hazards of concern.	\$5,000	High	EAP	ES, PI



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will implement a system and registry that will contain contact information for the at-need population. This will include a name, phone number, and the best way to contact the person. The City will promote this system and encourage residents to sign up so they will be notified during an emergency. This will also allow the City to provide the residents with the necessary goods and services before, during, and after a hazard event.										
2023-City of Bexley-004	Inflow and Infiltration Reduction*	<p>Problem: Private residential houses contribute large amounts of groundwater into the sanitary system. Illegal stormwater connections through downspouts, floor drains, sump pumps and yard drains overcome the capacity of the sanitary system, causing discharge into residents' homes. This hazard covers the 2.5 square miles of the City of Bexley. Bexley's high-water table does contribute to the problem.</p> <p>Solution: The City will help residents participate in home inspections to identify cross connections between storm and sanitary systems. The City will provide grant money or loan options to help with remediation. This would allow the City to install sump pumps in residential homes, reducing the foundation drainage into the sanitary systems. Contractors will excavate the floor drain where the cross connection predominantly is located and re-route the foundation drain to a sump pit that would be discharged to the curb and gutter drain.</p>	Disease Outbreak, Flood, Geologic, and Severe Weather	2,5,6	Less than 5 Years	City of Bexley's Water & Sewer Dept.	Ohio EPA, CDBG, FMA, BRIC	Mitigating the amount of groundwater introduced into the sanitary system will reduce property damage to residential homes.	\$4,940,000 (1,300 homes in projected area X \$3,800 per sump pump installed)	High	SIP, NSP	SP, NR



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Bexley's DFFO has highlighted areas of severity in a 2013 study.										
2023-City of Bexley-005	Repetitive Loss Mitigation	<p>Problem: The City of Bexley has three repetitive loss (RL) properties. Many of these structures were built with limited flood design standards. These properties require mitigation to prevent future loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, the City will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition, purchase, moving, or elevating of residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	Flood, Severe Weather, Severe Winter Weather	6	Less than 5 years	RL Property Owners, Ohio EPA	FMA, HMGP, BRIC, CDBG	The City will experience fewer losses in relation to RL structures.	TBD after mitigation alternative is chosen	High	SIP	SP
2023-City of Bexley-006	Disaster Debris Management Plan	<p>Problem: The City of Bexley does not have a Disaster Debris Management Plan to establish guidelines for managing debris from disasters.</p> <p>Solution: The City will create a Disaster Debris Management Plan to establish procedures for managing disaster debris from the identified hazards of concerns and will integrate the current HMP.</p>	Dam/Levee, Earthquake, Flood, Geologic, Invasive Species, Severe Weather, Severe Winter Weather, Tornado	1,4	1 Year	Bexley Administration	City Budget, HMGP	The City will be better prepared to handle debris from hazards.	\$2,000	High	LPR	ES

*Mitigation initiative is related to a critical facility and/or community lifeline
Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program

Timeline:
The time required for completion of the project upon implementation.



FEMA	Federal Emergency Management Agency	HMGP	Hazard Mitigation Grant Program
HMA	Hazard Mitigation Assistance	BRIC	Building Resilient Infrastructure and Communities Program
N/A	Not applicable		
NFIP	National Flood Insurance Program		

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and stormwater management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.2-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Bexley-001	Upgrade Sewer System	1	1	0	1	1	1	1	1	1	1	1	1	1	1	13	High
2023-City of Bexley-002	Public Education and Outreach	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
2023-City of Bexley-003	Develop Registry for At-Need Populations	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2023-City of Bexley-004	Inflow and Infiltration Reduction	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2023-City of Bexley-005	Repetitive Loss Mitigation	1	1	0	1	1	1	0	1	1	1	1	1	1	0	11	High
2023-City of Bexley-006	Disaster Debris Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.3 BLENDON TOWNSHIP

This section presents the jurisdictional annex for Blendon Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Blendon Township participated in the planning process, an assessment of Blendon Township 's risk and vulnerability, the different capabilities used in Blendon Township, and an action plan that will be implemented to achieve a more resilient community.

9.3.1 Hazard Mitigation Planning Team

Blendon Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Blendon Township departments, including the Township Administrator. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.3-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	John N. Glamarco - Administrator	Name/Title:	Jim Welch - Trustee
Address:	6350 S. Hempstead Road Westerville, OH	Address:	6350 S. Hempstead Road Westerville, OH
Phone Number:	614-882-1270	Phone Number:	614-882-1270
Email:	-	Email:	Jim.welch@blendontwp.org
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors			
Name/Title Method of Participation:		No additional contributors	

9.3.2 Municipal Profile

Blendon Township is in the northeastern corner of Franklin County and is bordered by Sharon Township to the west, Mifflin Township to the south and Plain Township to the east. The City of Westerville is located in the western part of the Township and has annexed much of the western part of the Township. Columbus and Minerva Park have also annexed parts of the Township.

According to the American Community Survey, the 2021 population for Blendon Township was 10,073, a 11.07 percent increase from the 2010 Census population of 9,069. Data from the 2021 American Community Survey indicates that 7.5 percent of the population is 5 years of age or younger and 12.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.3.3 Jurisdictional Capability Assessment and Integration

Blendon Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- Administrative and technical capabilities.
- Fiscal capabilities.
- Education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Blendon Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Blendon Township and provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.3-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Blendon Township – Zoning Resolution	Local	Zoning Board of Appeals
<i>How does this reduce risk?</i> Blendon Township adopted the 2006 International Building Code.				
Zoning/Land Use Code	Yes	Blendon Township – Zoning Resolution	Local	Zoning Board of Appeals
<i>How does this reduce risk?</i> Blendon Township adopted a Zoning Resolution in 2012 to benefit the residents of the unincorporated Township. The Township Zoning supersedes and replaces the County Zoning in its entirety. The Zoning Resolution is provided to guide the understanding, application, and administration of Blendon Township Zoning Resolution by setting the purpose, and nature of zoning, the organization of the zoning resolution and the intent of the zoning districts.				
Subdivision Ordinance	Yes	Blendon Township – Zoning Resolution – Article IV – Planned Development Procedures and Regulations	Local	Zoning Board of Appeals
<i>How does this reduce risk?</i> Article IV identifies the rules of application for Planned Development Regulations. These Rules outline the identification of uses, Permitted uses, procedures, development standards. Within this Article are the rules and regulations for Planned Residential Districts. Land and buildings in this district can be used only for residential development, home occupation, accessory uses, schools and parks, religious uses and commercial uses that normally services and are associated with residential developments.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Flood Damage Reduction Regulation	County	Franklin County Floodplain Administration
<i>How does this reduce risk?</i> It is the purpose of these regulations to promote the public health, safety, and general welfare, and to: <ul style="list-style-type: none"> • Protect human life and health • Minimize expenditure of public money for costly flood control projects • Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public • Minimize prolonged business interruptions • Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard 				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<ul style="list-style-type: none"> Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard to protect property and minimize future flood blight areas Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions Minimize the impact of development on adjacent properties within and near flood prone areas Ensure that the flood storage and conveyance functions of the floodplain are maintained Minimize the impact of development on the natural, beneficial values of the floodplain Prevent floodplain uses that are either hazardous or environmentally incompatible Meet community participation requirements of the National Flood Insurance Program. 				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Franklin County Emergency Operations Plan	County	Franklin County EM&HS
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Blendon Community Plan	Local	Zoning Commission
<i>How does this reduce risk?</i> The Blendon Community Plan is a guide for future development in Blendon Township. The Plan includes recommendations for the community's future growth for new residential and business buildings. The plan highlights smart growth while maintaining its rural character.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	Franklin County and Township Stormwater Management Program	County, Local	County Engineer Office
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	Yes	Franklin County Public Health Plan	County	Department of Public Health
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of Blendon Township to oversee and track development.

Table 9.3-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Toole and Associates
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Blendon Township and their current responsibilities that contribute to hazard mitigation.

Table 9.3-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Township Planning Board
Zoning Board of Adjustment	Yes	Zoning Board of Appeals consist of five (5) members appointed by Township Board of Trustees and is responsible administrative review, conditional use permits and variances.
Planning Department	Yes	Township
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Blendon Township staff, along with help from the City of Westerville economic development team, work to promote the features and amenities of Blendon Township. In addition, many studies are commissioned to help guide us into the future.
Public Works/Highway Department	Yes	Blendon Township Service Department is responsible for road maintenance, storm sewer maintenance, snow removal, park maintenance, cemetery maintenance, street signs and a variety of other public service needs. The staff consists of a Service Director and two equipment operators.
Construction/Building/Code Enforcement Department	Yes	The Township
Emergency Management/Public Safety Department	Yes	Franklin County Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	NPDES
Mutual aid agreements	Yes	Franklin County Police Department
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Toole and Associates
Engineers or professionals trained in building or infrastructure construction practices	Yes	Zoning Department

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to Blendon Township .

Table 9.3-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Blendon Township.

Table 9.3-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Chief of Police
Personnel skilled or trained in website development	Yes	Township Administration
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-

Outreach Resources	Available? (Yes/No)	Comment:
Natural disaster/safety programs in place for schools	Yes	Township Police Department
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to Blendon Township .

Table 9.3-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.3-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Tornado	Moderate

9.3.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the national Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Blendon.

Table 9.3-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Blendon (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

Flood Vulnerability Summary

The following table provides a summary of the NFIP program in Blendon Township.

Table 9.3-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. • Do you maintain a list of properties that have been damaged by flooding?	Executive Parkway
• Do you maintain a list of property owners interested in flood mitigation? • How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway.	No
• How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction?	SD requirements are triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value). No determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	No

NFIP Topic	Comments
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	N/A
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Franklin County Flood Damage Prevention Ordinance
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	N/A
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.3.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.3-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.3-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.3.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Blendon Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Blendon Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.3-1. Blendon Township Hazard Area Extent and Location Map-Flood

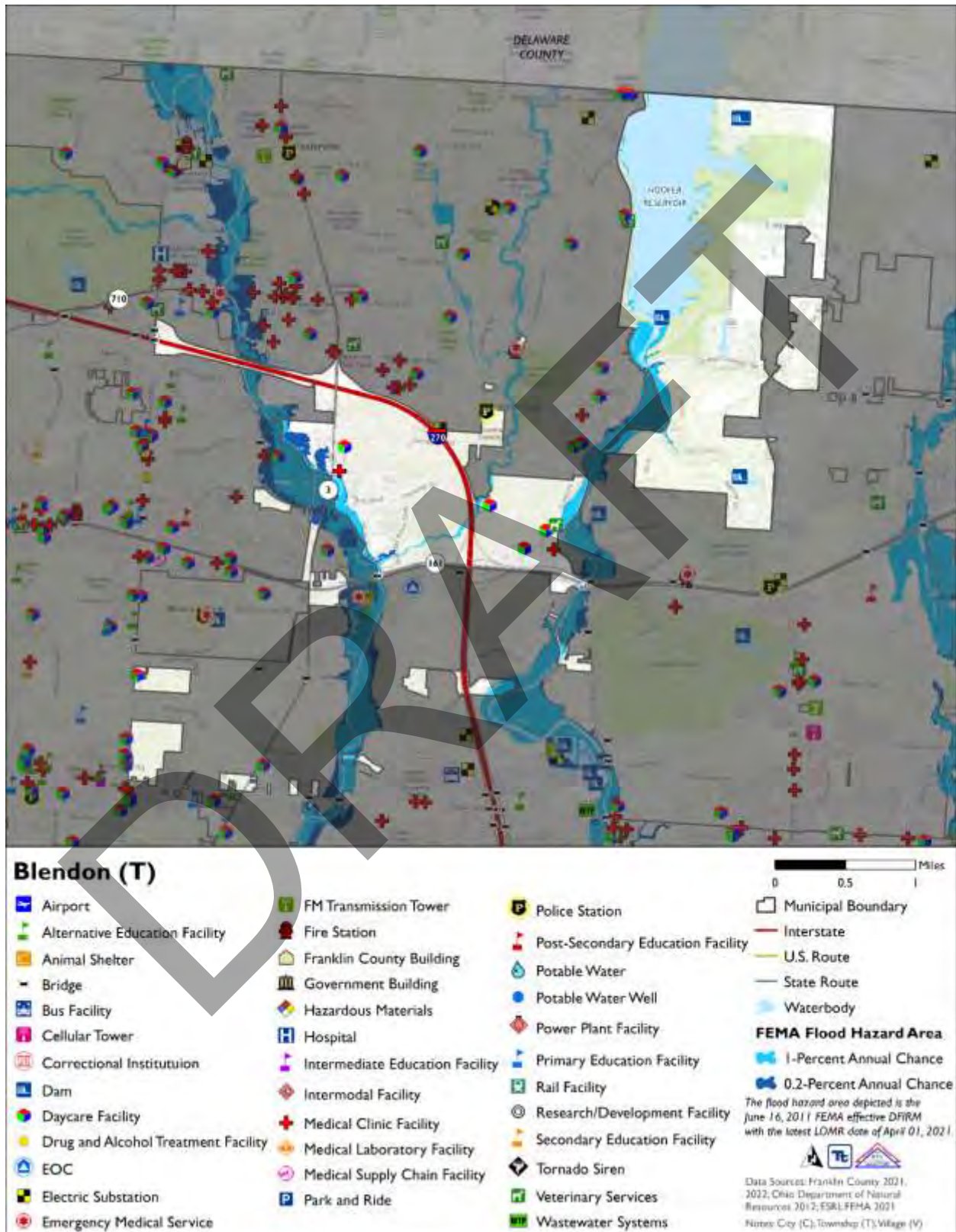


Figure 9.3-2. Blendon Township Hazard Area Extent and Location Map-Inland Erosion

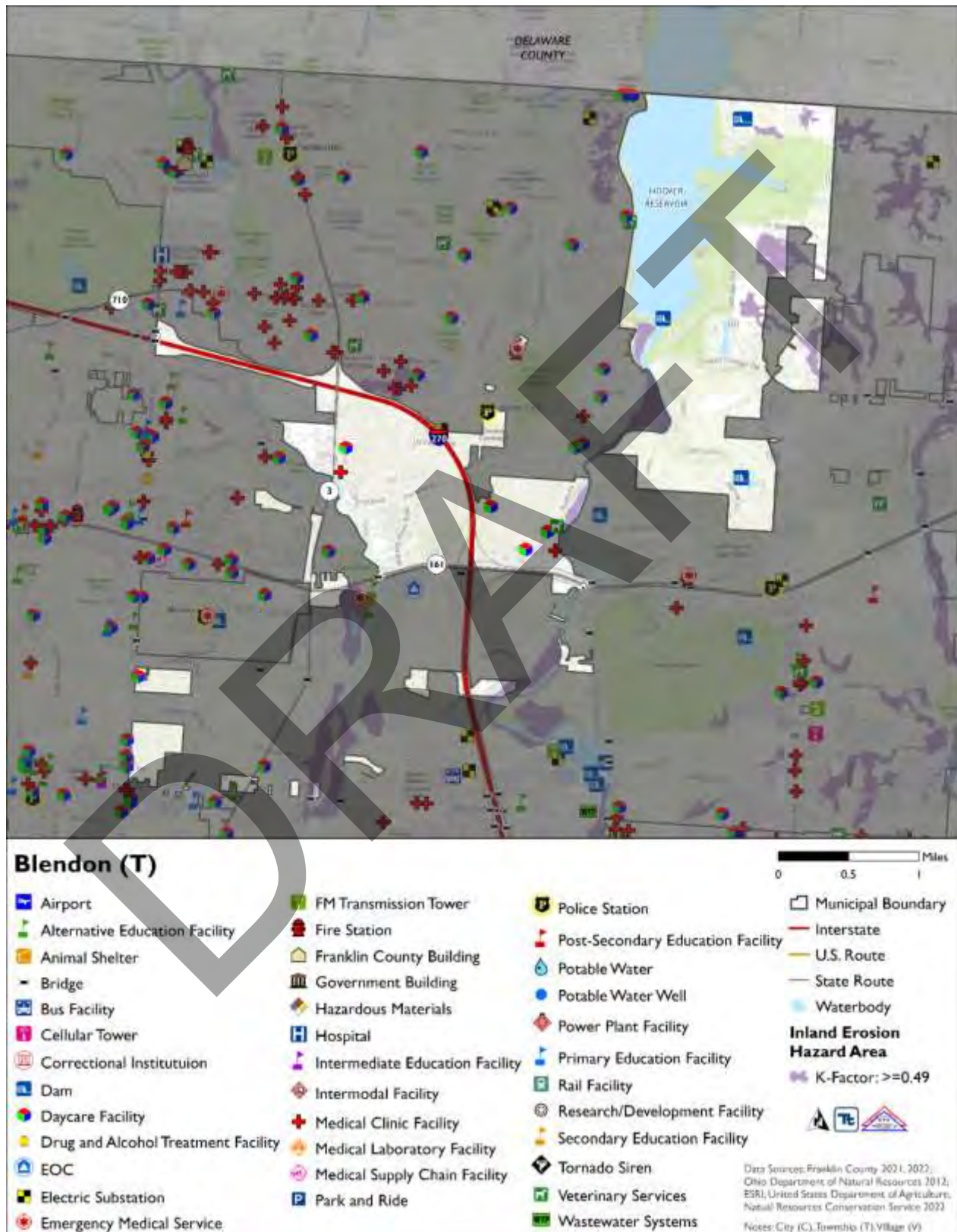


Figure 9.3-3. Blendon Township Hazard Area Extent and Location Map-Land Subsidence

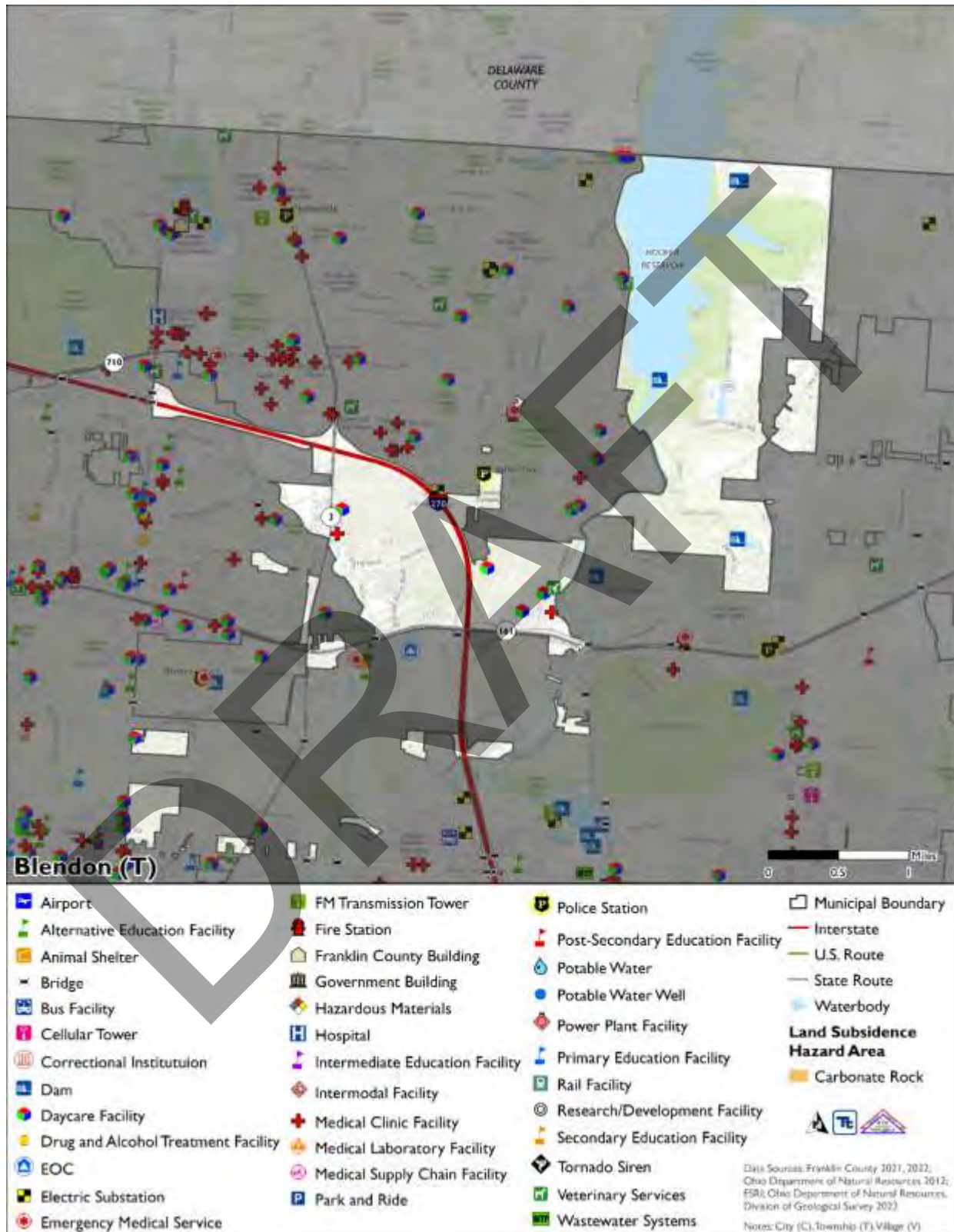
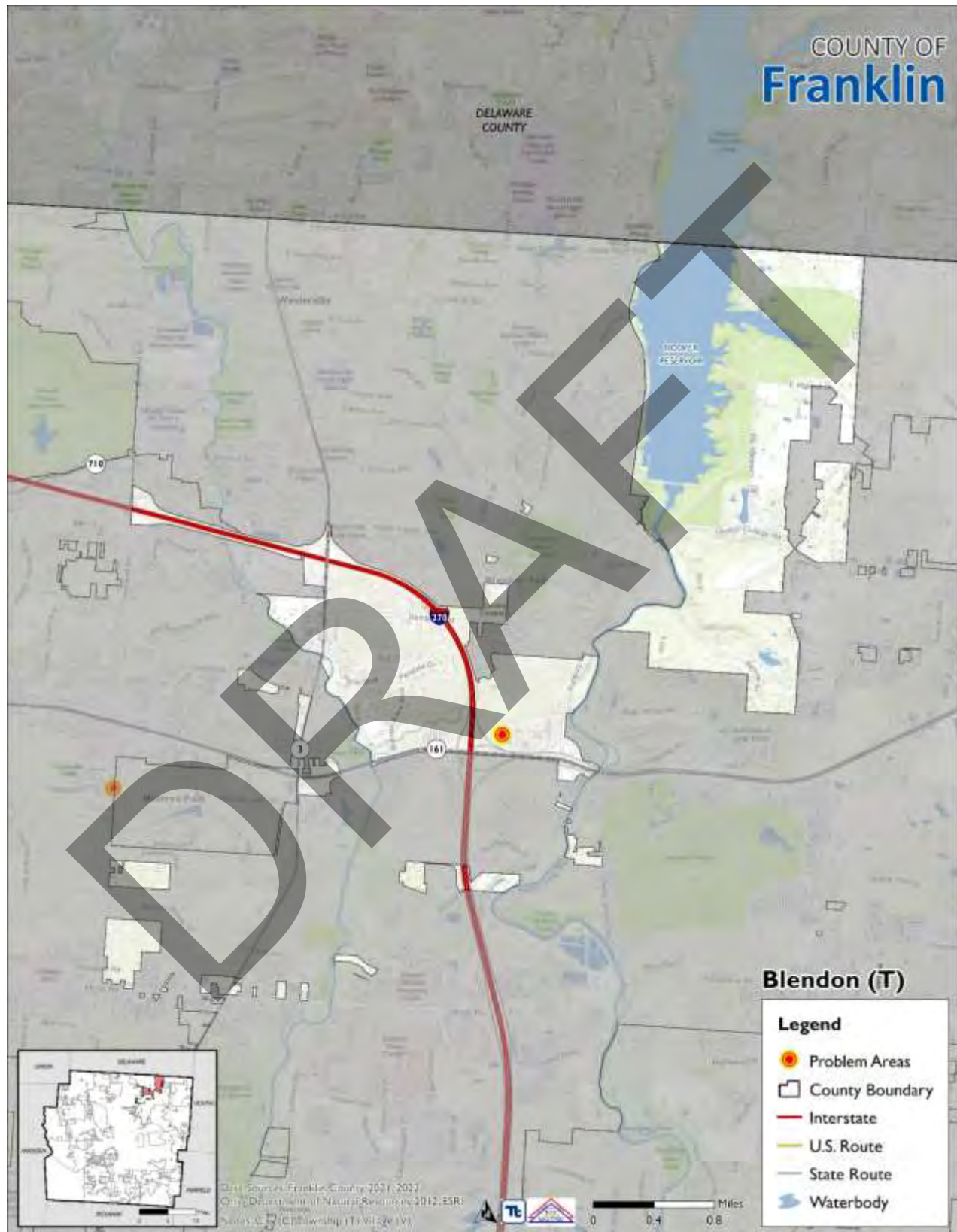


Figure 9.3-4. Blendon Township Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Blendon Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Bexley experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.3-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Blendon Township.

Blendon Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Blendon Township agreed with all of the following hazard risk rankings.

Table 9.3-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards area of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.3-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Bexley

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	2	1
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in or could impact Blendon Township:

- The Hoover dam is located within the 1% and 0.2% flood area

Identified Issues

In addition to the risk assessment, the Township of Blendon identified the following vulnerabilities within its community:

- The Township building code does not include building and site design standards to withstand strong winds from severe storms and severe winter weather.

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- Blendon Township does not have a certified Floodplain Administrator
- Blendon Township does not have a Disaster Debris Management Plan
- Hoover Dam is a critical facility located within the 1-percent floodplain. Hoover Dam dams the Big Walnut Creek to form the Hoover Memorial Reservoir and is a major water source for surrounding areas. Heavy rainfall, Severe Summer Weather events can impact the reservoir causing flooding to Blendon Township
- Hoover Dam is a high hazard dam located in Blendon Township. Failure of the dam would impact the Township and surrounding areas and potentially threaten life and property.

9.3.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and previously are presented in the Capability Assessment earlier in this annex.

Table 9.3-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Install generators for critical infrastructure and emergency shelters	Township	Complete	No	-	-

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Blendon Township identified the following mitigation efforts completed since the last HMP:

- Install generators for critical facilities and emergency shelters

Since the adoption of the County's first HMP, Blendon Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Blendon Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.3-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	X	X	X	-	-	X
Disease Outbreak	X	-	-	X	X	-	X	-	-	X
Drought	X	-	-	X	X	-	X	-	-	X
Earthquake	X	-	-	X	X	-	X	-	-	X
Extreme Temp	X	-	-	X	X	-	X	-	-	X
Flood	X	-	-	X	X	-	X	-	-	X
Geologic	X	-	-	X	X	-	X	-	-	X
Invasive Species	X	-	-	X	X	-	X	-	-	X
Severe Summer Weather	X	-	-	X	X	X	X	-	-	X
Severe Winter Weather	X	-	-	X	X	X	X	-	-	X
Tornado	X	-	-	X	X	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.3-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Blendon Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.3-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Blendon Township-001	Promote Site and Building Design Standards	Problem: The Township building code does not include building and site design standards to withstand strong winds from severe storms and severe winter weather Solution: The Township will update its building code to incorporate using natural environment features such as wind buffers and incorporate passive ventilation in building and site design.	Severe Summer Weather, Severe Winter Weather, Tornado	1,2	1 to 2 years	Blendon Township	HMGP, Local Funds	Reduce loss of property and potential loss of life due to storm events	Low	High	LPR	PP, PR
2023-Blendon Township-002	All-Hazards Education Campaign	Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species,	2,4,5	1 to 2 years	Franklin County EM&HS, Pleasant Township	Local Budget	Increase awareness of potential hazard risks, reduce loss of life and property	Low	High	EAP	PI, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		information to protect themselves and understand the threats of all hazards.	Severe Summer Weather, Severe Winter Weather, Tornadoes									
2023-Blendon Township-003	Establish Floodplain Administrator	<p>Problem: Blendon Township does not have a certified Floodplain Administrator</p> <p>Solution: Blendon Township will work with Franklin County to establish a Floodplain Administrator and maintain certification once selected.</p>	Dam/Levee Failure, Flood	1	1 to 2 years	Blendon Township, Franklin County	Local Budget	Reduce risk of loss of property in the floodplain	Low	High	LPR	PR
2023-Blendon Township-004	Develop Disaster Debris Management Plan	<p>Problem: Blendon Township does not have a Disaster Debris Management Plan</p> <p>Solution: Blendon Township Zoning and Planning Department will develop a Disaster Debris Management Plan that will identify the procedure, guidelines and responsible parties for the beginning phases of disaster debris management</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather,	1,2	1 to 3 years	Blendon Township Zoning, Planning Department	Local Budget	Reduce risk of loss of property, reduce stormwater overflow and build up	Low	High	LPR	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Tornadoes									
2023-Blendon Township-005	Critical Facilities Flood Protection	<p>Problem: Hoover Dam is a critical facility located within the 1-percent floodplain. Hoover Dam dams the Big Walnut Creek to form the Hoover Memorial Reservoir and is a major water source for surrounding areas. Heavy rainfall, Severe Summer Weather events can impact the reservoir causing flooding to Blendon Township</p> <p>Solution: Blendon Township will work with Franklin County Engineers to conduct a feasibility assessment to determine what additional flood protection measures are needed at the reservoir to protect it to the 500-year flood level.</p>	Dam/Levee Failure	6	Within 5 years	Blendon Township, Franklin County Engineers	FEMA HMGP and PDM, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Local budget	Ensure continuity of operations, facilities protected from flood damage	TBD by feasibility assessment	High	SIP	PP
2023-Blendon Township-006	Hoover Dam Emergency Planning	<p>Problem: Hoover Dam is a high hazard dam located in Blendon Township. Failure of the dam would impact the Township and surrounding areas and</p>	Dam/Levee Failure, Flood	1,2,3,4	Within 2 years	Blendon Township, Franklin County, City of Columbus	HHPD, Local Budget, Franklin County	Better emergency planning and partnership with neighbors	Low	High	LPR	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<p>potentially threaten life and property.</p> <p>Solution: Blendon Township will work with Franklin County and the City of Columbus to gather information on dam failure inundation zones, collaborate for dam failure warning systems, and coordinate emergency planning.</p>										

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria or prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.3-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Blendon Township-001	Promote Site and Building Design Standards	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Blendon Township-002	All-Hazards Education Campaign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Blendon Township-003	Establish Floodplain Administrator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Blendon Township-004	Develop Disaster Debris Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Blendon Township-005	Critical Facilities Flood Protection	1	1	1	0	1	1	0	1	1	1	0	0	1	1	10	High
2023-Blendon Township-006	Hoover Dam Emergency Planning	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.4 VILLAGE OF BRICE

This section presents the jurisdictional annex for the Village of Brice that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Brice participated in the planning process, an assessment of the Village of Brice's risk and vulnerability, the different capabilities used in the Village of Brice, and an action plan that will be implemented to achieve a more resilient community.

9.4.1 Hazard Mitigation Planning Team

The Village of Brice identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village of Brice departments, including the Mayors Office. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.4-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	John Mathys - Mayor	Name/Title:	-
Address:	5990 Columbus Street, Brice, Ohio	Address:	-
Phone Number:	(614) 864-8591	Phone Number:	-
Email:	mayor@briceohio.com	Email:	-
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.4.2 Municipal Profile

Brice Village is along the eastern side of Franklin County and is surrounded by Truro Township and is roughly 11 miles from Columbus. The Village has a total area of .10 square miles and is all land.

According to the American Community Survey, the 2021 population for Brice Village was 185, a 62.28 percent increase from the 2010 Census population of 114. Data from the 2020 U.S. Census indicate that 11.9 percent of the population is 5 years of age or younger and 19.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.4.3 Jurisdictional Capability Assessment and Integration

The Village of Brice performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- Administrative and technical capabilities.
- Fiscal capabilities.
- Education and outreach capabilities.
- Classification under various community mitigation programs.
- Adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Brice to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Brice and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.4-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Building Code	Yes	Local Zoning Code	Local	Zoning Department
<i>How does this reduce risk?</i> The Village of Brice adopted the Franklin County Building Code.				
Zoning/Land Use Code	No	-	-	-
<i>How does this reduce risk?</i>				
Subdivision Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Brice to oversee and track development.

Table 9.4-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Franklin County
If you do not issue development permits, what is your process for tracking new development?	N/A	
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Brice and their current responsibilities that contribute to hazard mitigation.

Table 9.4-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	Yes	Village Zoning Officer is responsible issuing zoning permits
Planning Department	Yes	Building Department issues building permits
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Mutual Aid with Franklin County
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Zoning Officer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Zoning Officer
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	Village of Brice Police
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Brice.

Table 9.4-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Brice.

Table 9.4-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Brice.

Table 9.4-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.

- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.4-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.4.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes the NFIP statistics for the Village of Brice.

Table 9.4-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Brice (V)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Brice.

Table 9.4-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	No

NFIP Topic	Comments
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	<p>SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.</p> <p>According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).</p>
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None, No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No
NFIP Compliance	
What local department is responsible for floodplain management?	N/A
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	N/A
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	N/A
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	N/A
What are the barriers to running an effective NFIP program in the community, if any?	N/A

NFIP Topic	Comments
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	N/A
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	N/A
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Zoning Code
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	N/A

9.4.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development. Franklin County is responsible for issuing building permits.

Table 9.4-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.4-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Not Applicable					
Known or Anticipated Major Development in the Next Five (5) Years					
Not Applicable					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.4.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Brice's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Brice has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.4-1. Village of Brice Hazard Area Extent and Location Map-Flood

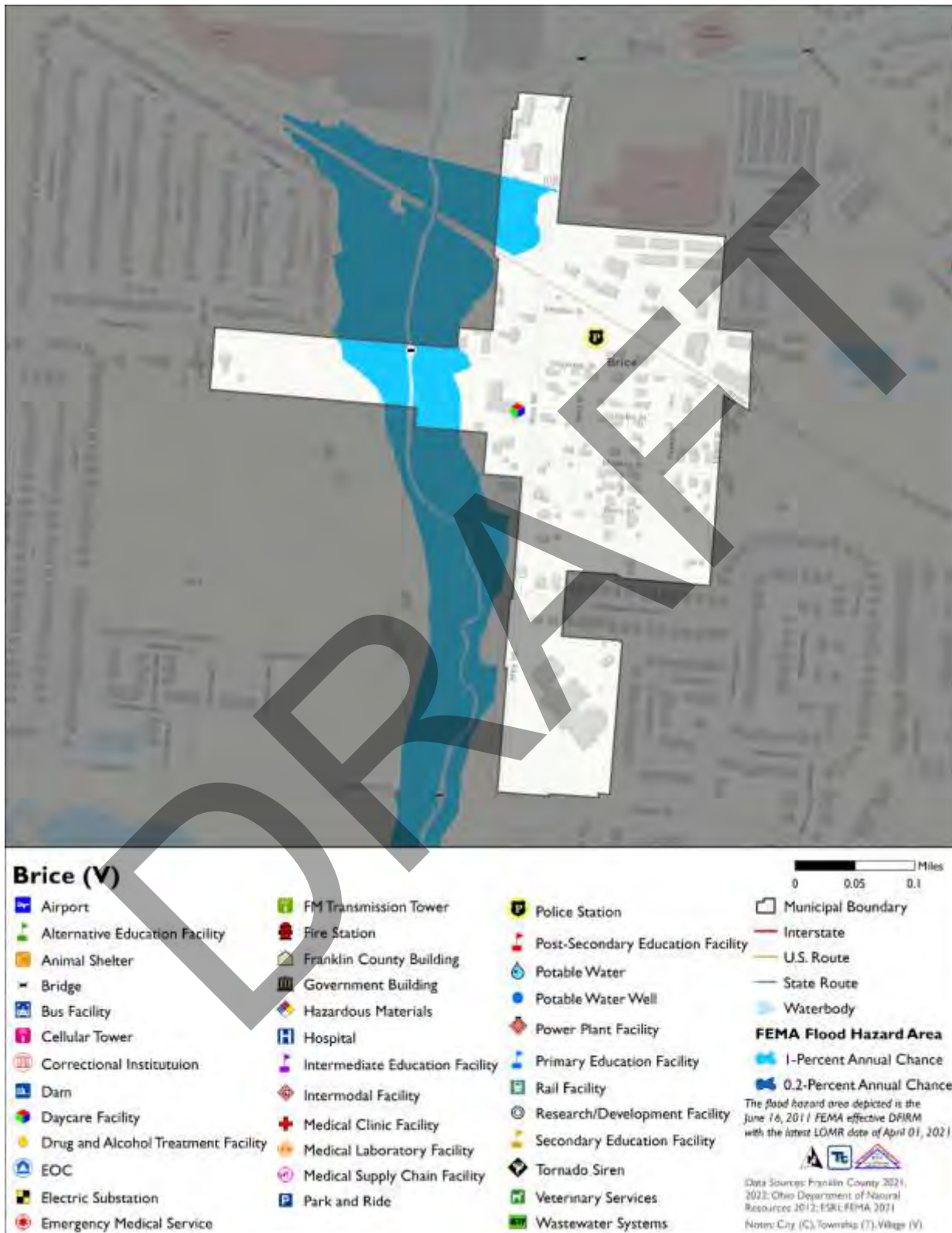


Figure 9.4-2. Village of Brice Hazard Area Extent and Location Map-Inland Erosion

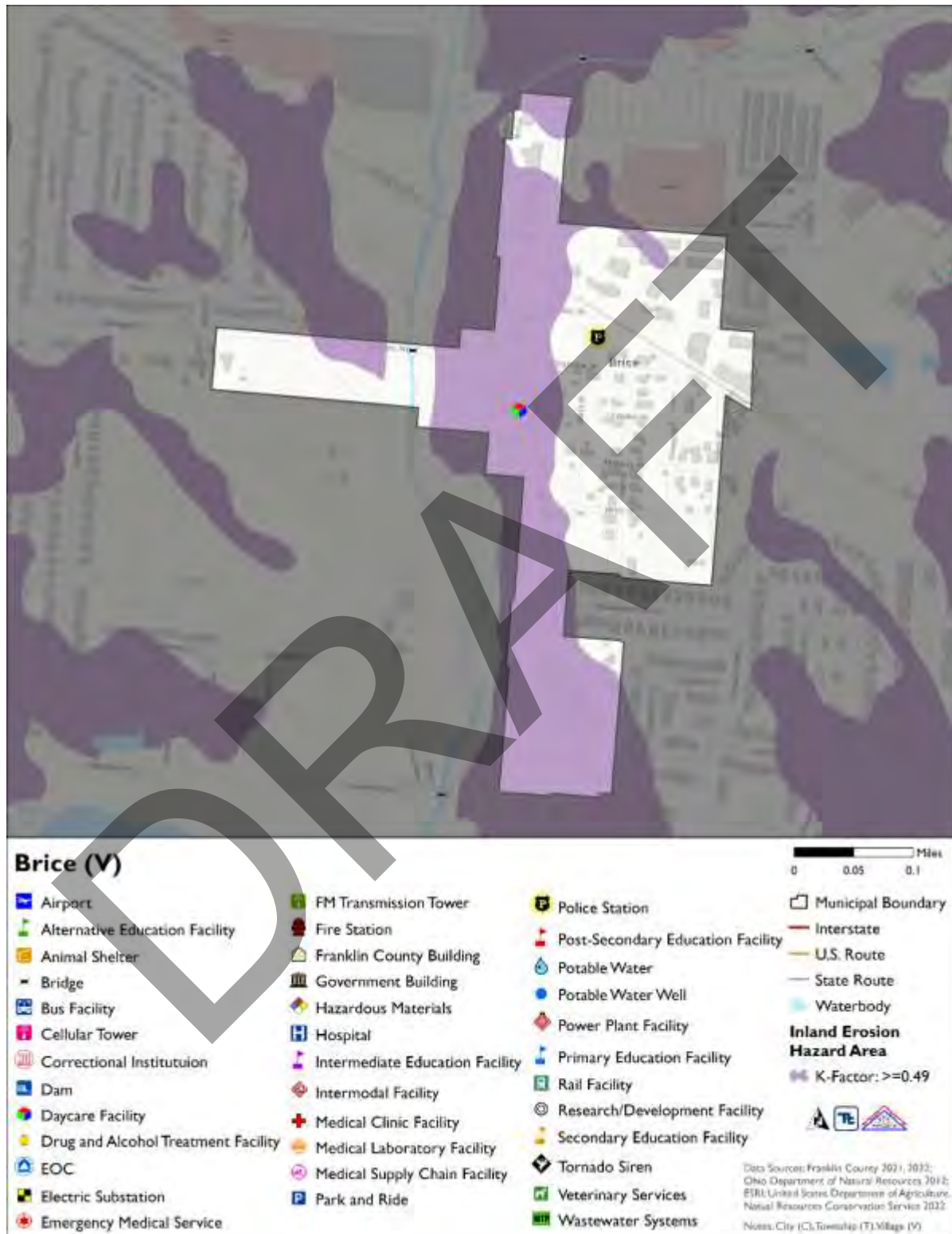
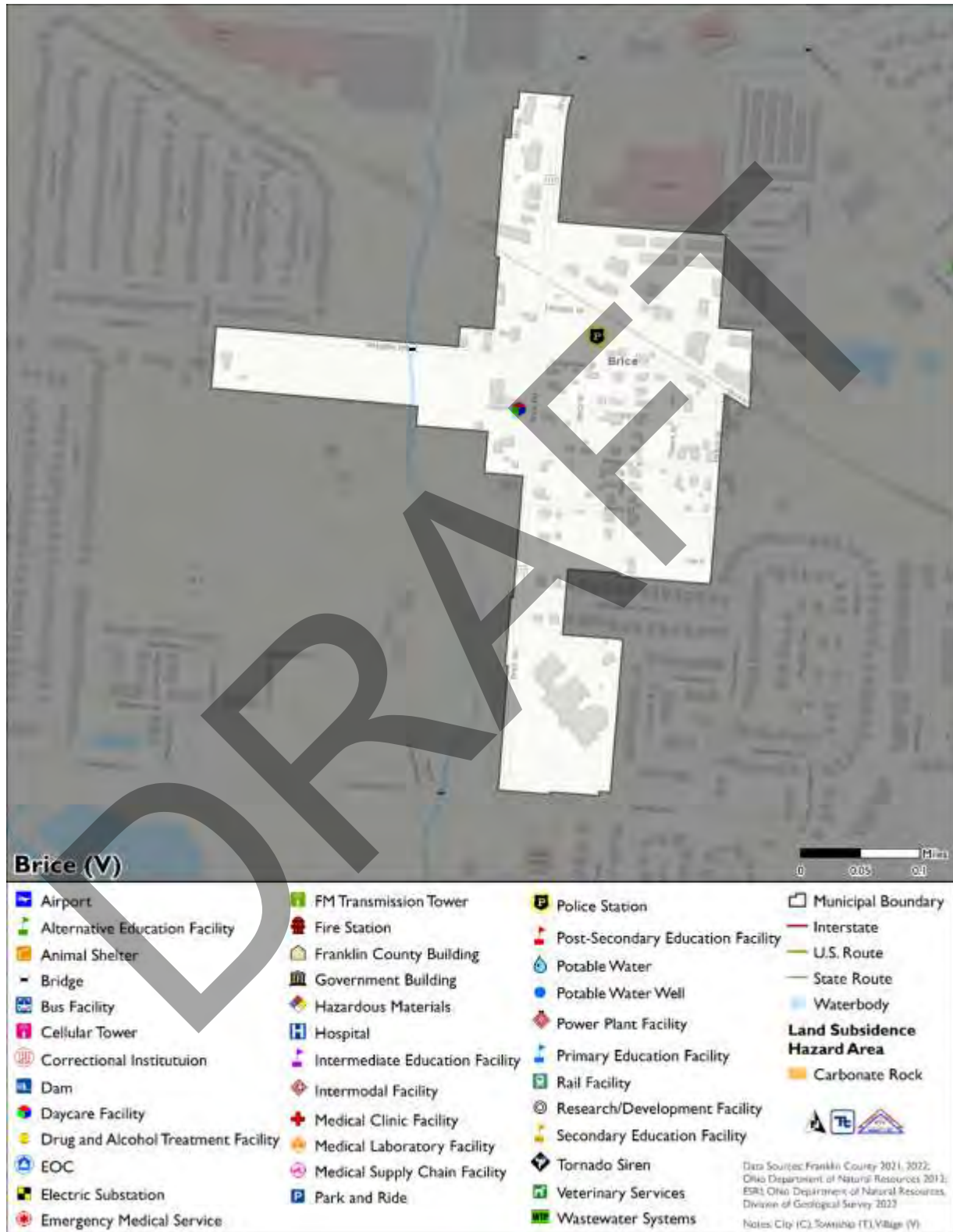


Figure 9.4-3. Village of Brice Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Brice's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Bexley experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.4-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Village did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Village did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, Fort Bend County had 347,221 reported cases and 2,721 reported deaths.	The Village did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Brice. The

Village of Brice reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Village of Brice agreed with all of the following hazard risk rankings.

Table 9.4-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.4-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Brice

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	1	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Villager of Brice identified the following vulnerabilities within its community:

- The Village does not have tornado siren efficient enough to reach all incorporated areas
- The Village does not have weather alert radios in the event of emergency

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- The Village of Brice does not have a Disaster Debris Management Plan to establish guidelines for managing debris from disasters.

9.4.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.4-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (10 facilities @ 1000 / 2 months)	Village Administration and Mayor's office	-	-	-	-
Purchase Tornado Sirens through the Franklin County Emergency Management & Homeland Security for community. (3 @ 60,000 / 4 months)	Village Administration and Mayor's office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Brice identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Village of Brice has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Brice participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures' (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (FEMA, January 2013).

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.4-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	-	-	X	-	-	X
Disease Outbreak	X	X	-	X	-	-	X	-	-	X
Drought	X	X	-	X	-	-	X	-	-	X
Earthquake	X	X	-	X	-	-	X	-	-	X
Extreme Temp	X	X	-	X	-	-	X	-	-	X
Flood	X	X	-	X	-	-	X	-	-	X
Geologic	X	X	-	X	-	-	X	-	-	X
Invasive Species	X	X	-	X	-	-	X	-	-	X
Severe Summer Weather	X	X	-	X	-	-	X	-	-	X
Severe Winter Weather	X	X	-	X	-	-	X	-	-	X
Tornado	X	X	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.4-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Brice will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.4-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Village of Brice-001	Purchase Tornado Sirens*	Problem: The Village does not have tornado siren efficient enough to reach all incorporated areas Solution: The Village will work with the Franklin County Emergency Management and Homeland Security to purchase three (3) new tornado sirens	Tornado	2,3,5	1 to 2 years	Brice Village Administrators and Mayor Office, Franklin County EM&HS	Local Budget	Increase warning time for tornado events	\$60,000	High	EAP	ES
2023-Village of Brice-002	Purchase NOAA Weather Alert Radios*	Problem: The Village does not have weather alert radios in the event of emergency Solution: The Village will work with NOAA to purchase weather alerts radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2,3,5	1 to 2 years	Brice Village Administrators and Mayor Office, NOAA	Local Budget	Increase communication of hazard events	\$1,000	High	EAP, SIP	ES, PP
2023-Village of Brice-003	All-Hazards Education Campaign	Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. Solution: The Village will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2,4,5	1 to 2 years	Franklin County EM&HS, Brice Village	Local Budget	Increase awareness of potential hazard risks, reduce loss of life and property	Low	High	EAP	PI, ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Village of Brice-004	Disaster Debris Management Plan*	<p>Problem: The Village of Brice does not have a Disaster Debris Management Plan to establish guidelines for managing debris from disasters.</p> <p>Solution: The Village will create a Disaster Debris Management Plan to establish procedures for managing disaster debris from the identified hazards of concerns and will integrate the current HMP.</p>	Dam/Levee, Earthquake, Flood, Geologic (Erosion), Geologic (Land Subsidence), Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	1,4	1 Year	Village Administrator and Mayors Office Administration	Village Budget, HMGP	The Village will be better prepared to handle debris from hazards.	Low	High	LPR	ES

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:
The time required for completion of the project upon implementation.

Cost:
The estimated cost for implementation.

Benefits:
A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.



Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria or prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.4-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Village of Brice-001	Purchase Tornado Sirens	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2023-Village of Brice-002	Purchase NOAA Weather Alert Radios	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Village of Brice-003	All-Hazards Education Campaign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Village of Brice-004	Disaster Debris Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.5 BROWN TOWNSHIP

This section presents the jurisdictional annex for Brown Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Brown Township participated in the planning process, an assessment of Brown Township’s risk and vulnerability, the different capabilities used in Brown Township, and an action plan that will be implemented to achieve a more resilient community.

9.5.1 Hazard Mitigation Planning Team

Brown Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Brown Township departments, including Fiscal Officer and Trustee. The Fiscal Officer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.5-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Becky Kent – Fiscal Officer	Name/Title:	Joe Martin – Trustee
Address:	2491 Walker Rd., Hilliard, OH	Address:	2491 Walker Rd., Hilliard, OH
Phone Number:	(614) 876-2133	Phone Number:	(614) 876-2133
Email:	becky_kent@BrownTwp.org	Email:	joe_martin@browntwp.org
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.5.2 Municipal Profile

Brown Township is along the western side of Franklin County and is bordered by Washington and Norwich Townships to the east, Prairie Township to the south and Madison County to the west. A small part of the city of Hilliard is located in northeastern Brown Township, and part of Lake Darby lies in the Township's southwest. Columbus is 14.8 miles from the Township.

According to the American Community Survey, the 2021 population for the Township of Brown was 3,679, a 60.44 percent increase from the 2010 Census population of 2,293. Data from the 2021 American Community Survey indicates that 3.8 percent of the population is 5 years of age or younger and 14.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.5.3 Jurisdictional Capability Assessment and Integration

Brown Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events
-

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Brown Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Brown Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.5-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Franklin County Building Code	County	Franklin County Planning Division
<i>How does this reduce risk?</i> The Township adopted Franklin County Building Code.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution	County	Franklin County Zoning Division
<i>How does this reduce risk?</i> Brown Township utilizes Franklin County's Zoning Division to enforce zoning regulations and resolutions. The purpose of zoning it to promote public health, safety and general welfare throughout the Township.				
Subdivision Ordinance	Yes	Subdivision Regulations	County	Franklin County Zoning Division
<i>How does this reduce risk?</i> The Township utilizes Franklin County's Zoning Division to enforce subdivisions. Any subdivision of land should not create lots less than the minimum size required for the zoning district which it is located and must be in accordance with the Subdivision Regulations of Franklin County.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Franklin County Zoning Resolution	County	Franklin County Zoning Division
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Comprehensive/Master Plan	Yes	Brown Township Comprehensive Plan	Local	Brown Township
<i>How does this reduce risk?</i> Brown Township Comprehensive Plan serves to move the township towards unified goals and interests which transcend the desires of any individual interests. The Plan aims to preserve the rural lifestyle and natural resources found within the community.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	Yes	Agricultural Preservation Plan	Local	Brown Township
<i>How does this reduce risk?</i> The Brown Agricultural Preservation Plan is a land use document that defines suitable development which preserves agricultural land and open space while enhancing the health and sovereignty of the township.				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of Brown Township to oversee and track development.

Table 9.5-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Franklin County Zoning Division issues permits for the Township.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Brown Township and their current responsibilities that contribute to hazard mitigation.

Table 9.5-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	County
Engineers or professionals trained in building or infrastructure construction practices	No	County
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to Brown Township.

Table 9.5-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Brown Township.

Table 9.5-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to Brown Township.

Table 9.5-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each

jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.5-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.5.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

9.5.5 NFIP Statistics

The following table summarizes the NFIP statistics for Brown Township.

Table 9.5-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Brown (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Brown Township.

Table 9.5-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	<p>SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.</p> <p>According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).</p>
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	N/A
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	N/A
NFIP Compliance	
What local department is responsible for floodplain management?	N/A
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	-
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	N/A
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A

NFIP Topic	Comments
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	All development goes through Franklin County
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	N/A
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	N/A
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	N/A
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.5.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.5-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
Number of Building Permits for New Construction Issued Since the previous HMP* (total/within regulatory floodplain)										
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	Franklin County issues all permits for new construction within Brown Township									
Multi-Family										
Other (commercial, mixed-use, etc.)										
Total Permits Issued										

Table 9.5-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
All Development in the Township goes through Franklin County					
Known or Anticipated Major Development in the Next Five (5) Years					

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
No anticipated development within the next 5 years					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.5.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Brown Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Brown Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.5-1. Brown Township Hazard Area Extent and Location Map-Flood

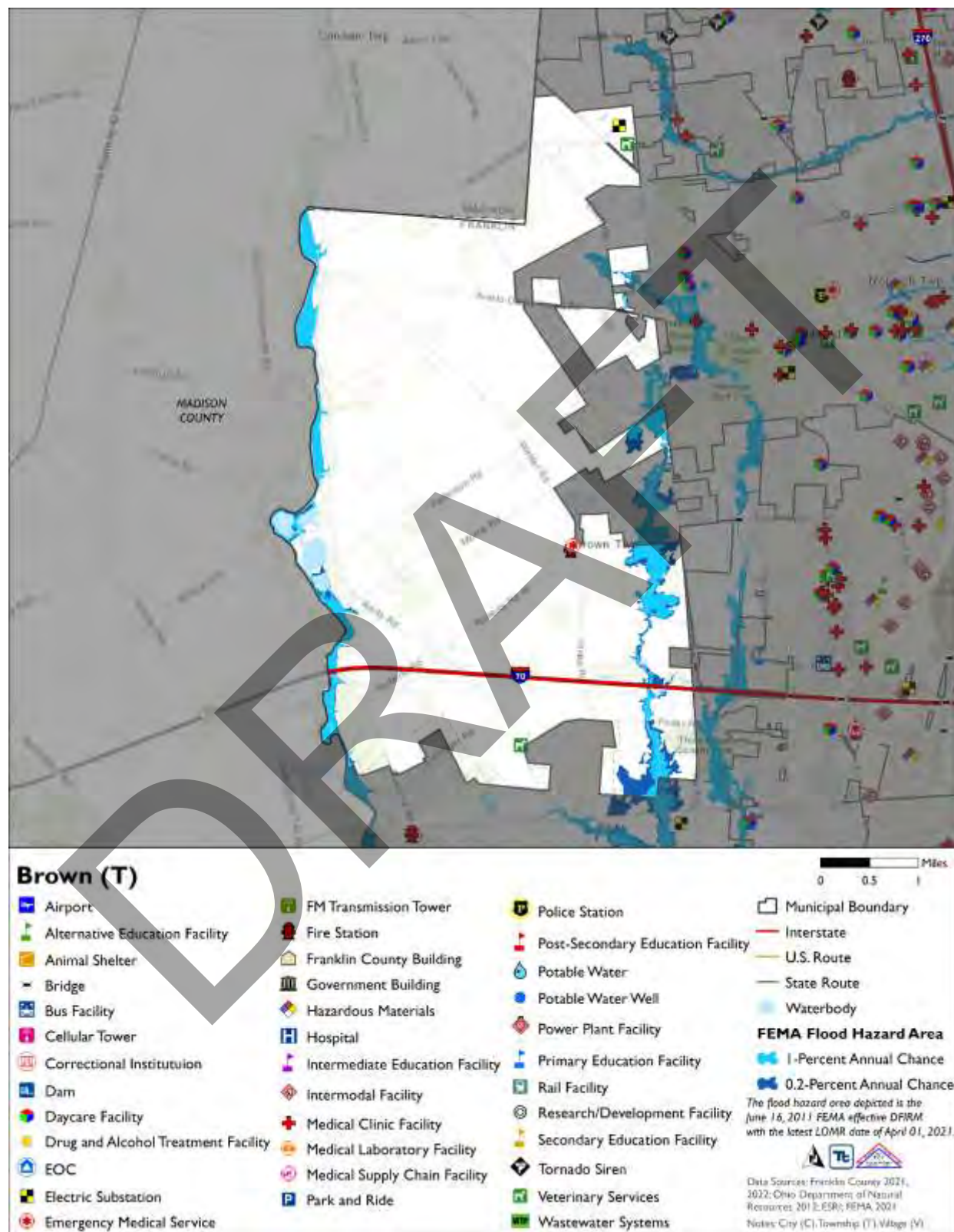


Figure 9.5-2. Brown Township Hazard Area Extent and Location Map-Inland Erosion

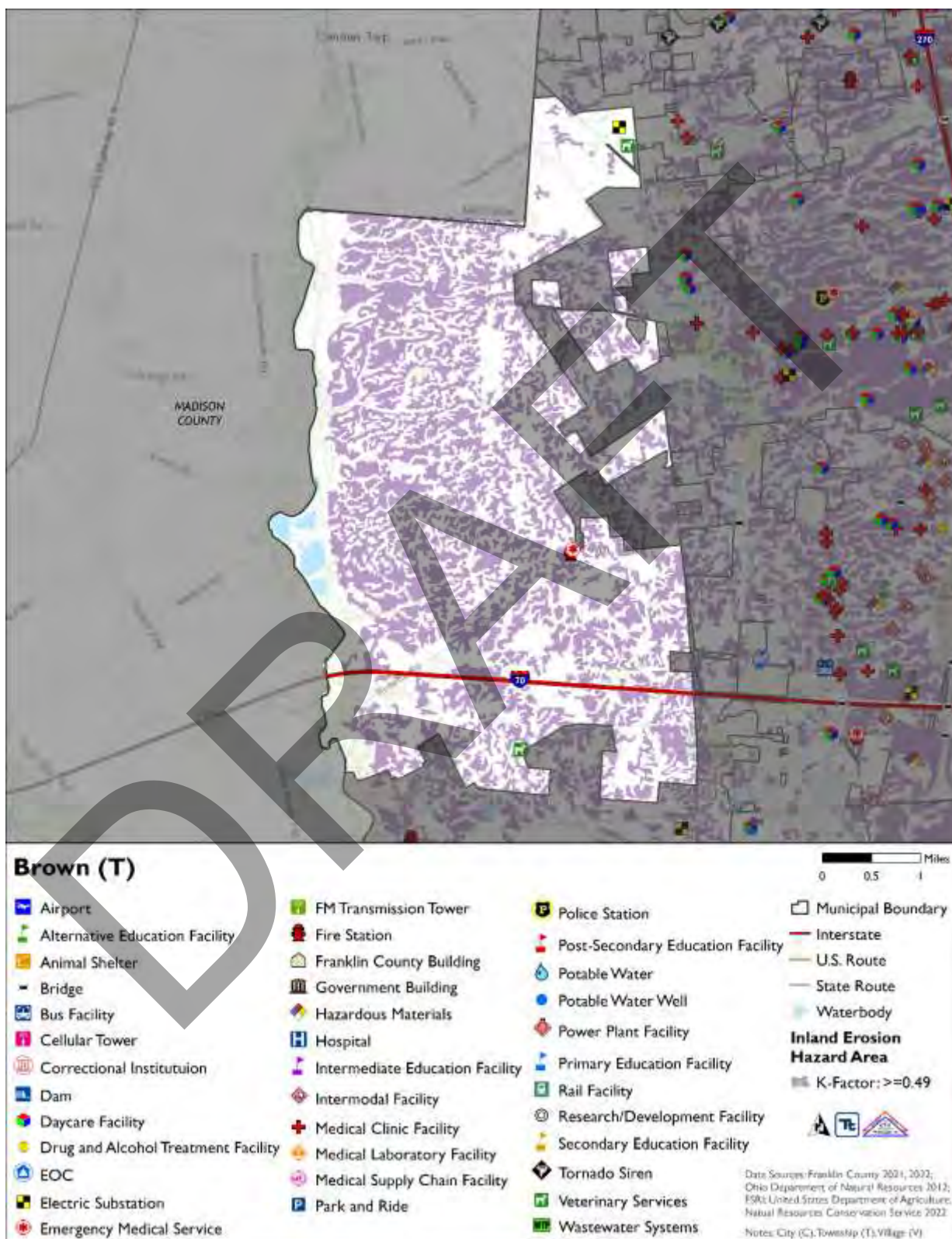


Figure 9.5-3. Brown Township Hazard Area Extent and Location Map-Land Subsidence

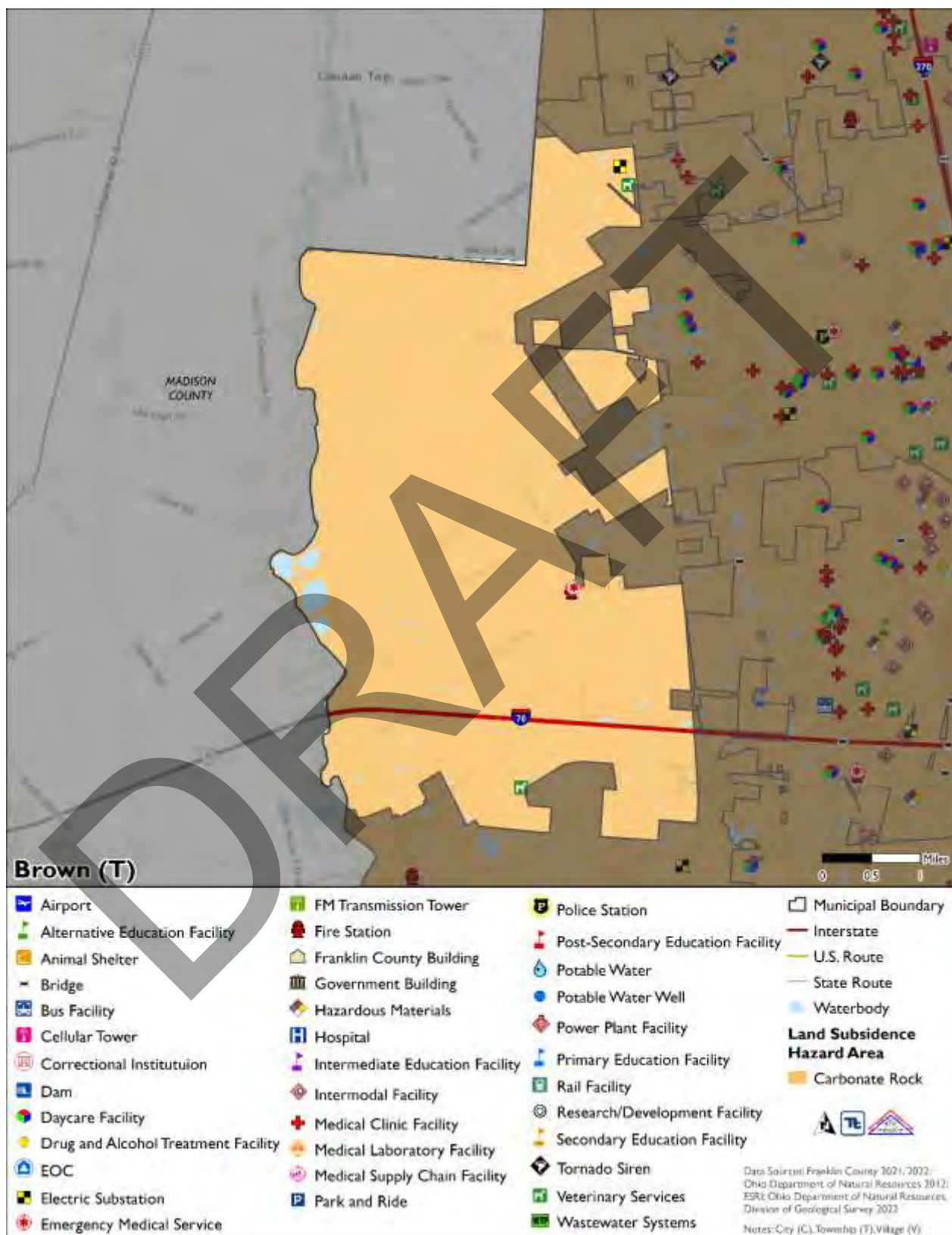
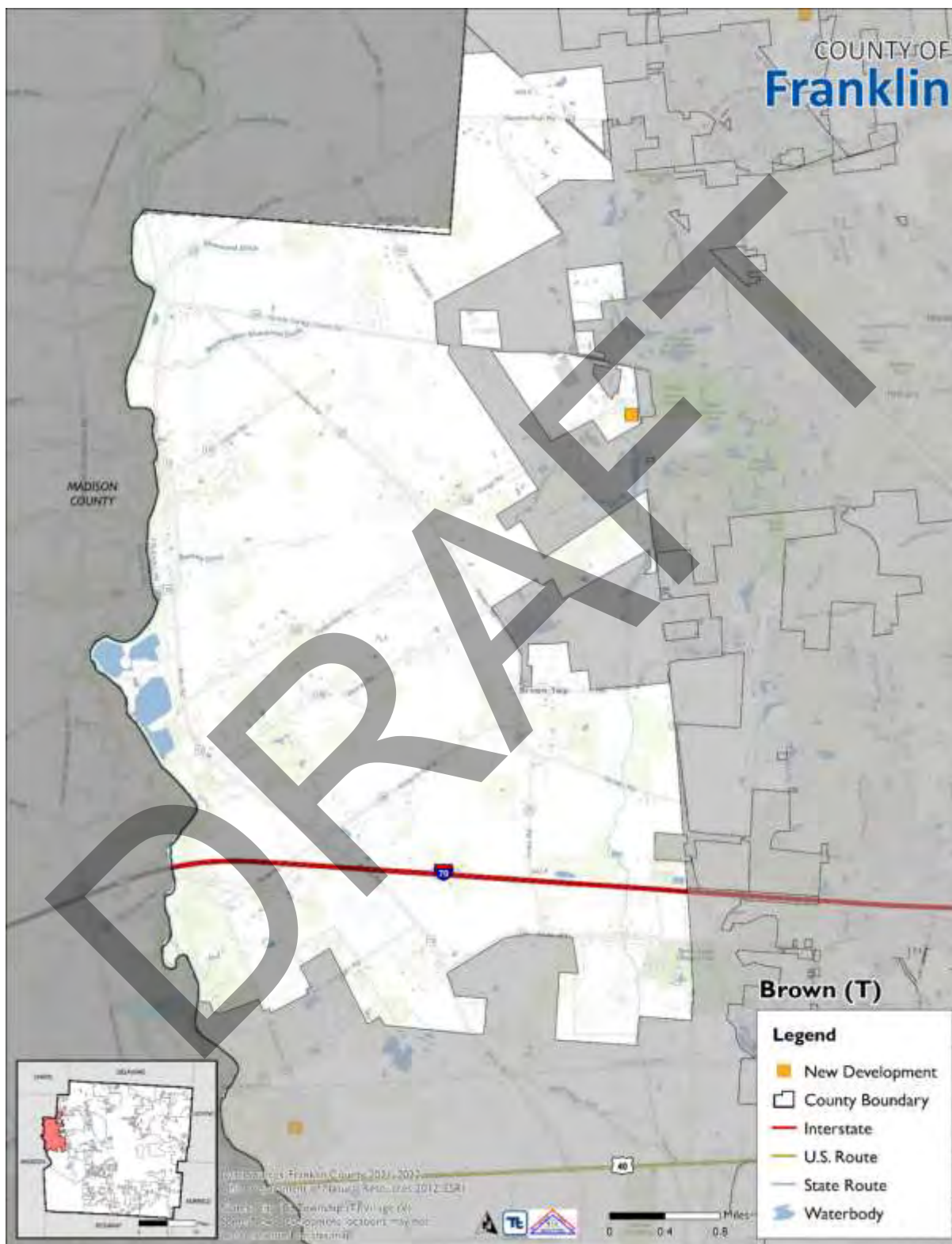


Figure 9.5-4. Brown Township New Development



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Brown Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Brown Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.5-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Brown Township. Brown

Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Brown Township agreed with all of the following risk rankings.

Table 9.5-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.5-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Brown Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	2	2
Subsidence (Karst/Carbonate Rock) Hazard Area	5	5
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Township of Brown identified the following vulnerabilities within its community:

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.

- Property owners in the Township do not have access to technical assistance and public information including outreach projects and technical information.
- The Township does not have tornado siren efficient enough to reach all incorporated areas
- Davis, Walker, Morris, and Patterson roads all experience stormwater flooding during heavy rain events.
- The Township has not updated the Comprehensive Plan since 2005.

9.5.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.5-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for public information including outreach projects and technical assistance to property owners. (15,000 / 1 year	Township Trustee's office	-	-	-	-
Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (No cost	Township Trustee's office	-	-	-	-
In cooperation with Franklin County Emergency Management & Homeland Security, purchase tornado sirens to cover gaps in coverage in Brown Township.	Township Trustee's office	-	-	-	-
Study and mitigate stormwater flooding along Davis, Walker, Morris, and Patterson roads.	Township Trustee's office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Brown Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, Brown Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Brown Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table further demonstrate the wide-range of activities and mitigation measures selected.

Table 9.5-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	X	X	X	-	-	X
Disease Outbreak	X	-	-	X	X	X	X	-	-	X
Drought	X	-	-	X	X	X	X	-	-	X
Earthquake	X	-	-	X	X	X	X	-	-	X
Extreme Temp	X	-	-	X	X	X	X	-	-	X
Flood	X	-	-	X	X	X	X	-	-	X
Geologic	X	-	-	X	X	X	X	-	-	X
Invasive Species	X	-	-	X	X	X	X	-	-	X
Severe Summer Weather	X	-	-	X	X	X	X	-	-	X
Severe Winter Weather	X	-	-	X	X	X	X	-	-	X
Tornado	X	-	-	X	X	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.5-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Township of Brown will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.5-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Brown Township-001	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2,4,5	1 to 2 years	Franklin County EM&HS, Brown Township	Local Budget	Increase awareness of potential hazard risks, reduce loss of life and property	Low	High	EAP	PI, ES
2023-Brown Township-002	Public Information/ Technical Assistance Funding	<p>Problem: Property owners in the Township do not have access to technical assistance and public information including outreach projects and technical information.</p> <p>Solution: The Township will work with Franklin County to secure funding that will benefit home owners with technical assistance and outreach projects to better inform them of hazard risks.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2,4,5	1 year	Brown Township Trustee's office, Franklin County EM&HS	Local budget, HMGP	Increase awareness of potential hazard risks, reduce loss of life and property for property owners	\$15,000	High	EAP	PP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Brown Township-003	Purchase Tornado Sirens	<p>Problem: The Township does not have tornado siren efficient enough to reach all incorporated areas</p> <p>Solution: The Township will work with the Franklin County Emergency Management and Homeland Security to purchase new tornado sirens that will cover the gaps in coverage within the Township</p>	Tornado	2,3,5	1 to 2 years	Brown Township Trustee's Office, Franklin County EM&HS	Local Budget	Increase warning time for tornado events	\$60,000	High	EAP	ES
2023-Brown Township-004	Stormwater Management Flood Study	<p>Problem: Davis, Walker, Morris, and Patterson roads all experience stormwater flooding during heavy rain events.</p> <p>Solution: The Township will work with Franklin County Emergency Management and Homeland Security to conduct a flood study on Davis, Walker, Morris and Patterson Roads to identify best mitigation practices to lessen the chances of flooding.</p>	Flood	1,2,3	1 to 2 years	Brown Township Trustees Office, Franklin County EM&HS	Local Budget	Reduce the risk of flooding on roadway infrastructure	Medium	High	LPR	PR
2023-Brown Township-005	Update Comprehensive Plan	<p>Problem: The Township has not updated the Comprehensive Plan since 2005.</p> <p>Solution: The Township will update the Comprehensive Plan to integrate hazard mitigation practices</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	1	1 to 2 years	Brown Township	Local Budget	Increase growth and development through the Township	Low	High	LPR	PR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.5-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Brown Township-001	All-Hazards Education Campaign	1	1	1	1	1	1	1	1	1	1	1	1	0	1	13	High
2023-Brown Township-002	Public Information Funding	1	1	1	1	1	1	1	1	1	1	1	1	0	1	13	High
2023-Brown Township-003	Purchase Tornado Sirens	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2023-Brown Township-004	Stormwater Management Flood Study	1	1	1	0	0	1	1	1	1	1	0	1	1	0	10	High
2023-Brown Township-005	Update Comprehensive Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.6 CITY OF CANAL WINCHESTER

This section presents the jurisdictional annex for the City of Canal Winchester that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Canal Winchester participated in the planning process, an assessment of the City of Canal Winchester's risk and vulnerability, the different capabilities used in the City of Canal Winchester, and an action plan that will be implemented to achieve a more resilient community.

9.6.1 Hazard Mitigation Planning Team

The City of Canal Winchester identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Canal Winchester departments, including Department of Public Services. The Director of Public Services represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.6-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Matt Peoples/ Director of Public Service	Name/Title:	Michael Ebert/ Mayor
Address:	45 E. Waterloo Street, Canal Winchester, OH	Address:	45 E. Waterloo Street, Canal Winchester, OH
Phone Number:	614-837-7493	Phone Number:	614-837-7493
Email:	mpeoples@canalwinchesterohio.gov	Email:	mebert@canalwinchesterohio.gov
NFIP Floodplain Administrator			
Name/Title:	Andrew Moore		
Address:	45 E. Waterloo St., Canal Winchester, OH 43110		
Phone Number:	614-837-6742		
Email:	amoore@canalwinchesterohio.gov		
Additional Contributors:			
Name/Title:		No additional contributors	
Method of Participation:			

9.6.2 Municipal Profile

The City of Canal Winchester is one of the far suburbs that make up the Columbus metropolitan area. The City annexed part of Madison Township which nearly surrounds the city. Fairfield County borders the City to the east and parts of the City of Pickerington border the City to the north. Walnut Creek and Little Walnut Creek pass through the City boundaries.

According to the American Community Survey, the 2021 population for the City of Canal Winchester was 9,209, a 29.69 percent increase from the 2010 Census population of 7,101. Data from the 2021 American Community Survey indicates that 8.5 percent of the population is 5 years of age or younger and 19.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.6.3 Jurisdictional Capability Assessment and Integration

The City of Canal Winchester performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Canal Winchester to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Canal Winchester and provides information as to how each capability integrates hazard mitigation and risk reduction.

**Table 9.6-2. Planning, Legal, and Regulatory Capability and Integration**

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Canal Winchester Code – Chapter 13, 1986, 2006, 2017, 2019	Local & State	Building
<i>How does this reduce risk?</i> Enforces administration and enforcement of the provisions of all laws, codes, ordinances, regulations, and orders applicable to construction to protect health and safety of residents.				
Zoning/Land Use Code	Yes	Canal Winchester Code – Part 11, 2001, 2007, 2008, 2011, 2012, 2015,	Local	Planning & Zoning
<i>How does this reduce risk?</i> The Code promotes the health, safety, morals and the general welfare of the community through the regulation of the height, number of stories and size of buildings and other structures, the percentage of lots that may be occupied, the size of yards, courts and other open spaces, the densities of population and the location and use of buildings, structures and land for industries and businesses.				
Subdivision Ordinance	Yes	Canal Winchester Code – Part 11, Chapters 1101 – 1130, 2008	Local	Planning & Zoning
<i>How does this reduce risk?</i> Enforces and establishes a formal subdivision plat to ensure use of land and property is for the good of the City and puts forth the health and safety of residents and property owners.				
Site Plan Ordinance	Yes	Canal Winchester Code – Part 11, Chapters 1181 – 1199, 2012	Local	Planning & Zoning
<i>How does this reduce risk?</i> The Site plan review chapter provisions are intended to secure compliance with the requirements and standards set forth.				
Stormwater Management Ordinance	Yes	Canal Winchester Code – Part 9, Chapter 941, 2010	Local	Public Service
<i>How does this reduce risk?</i> Provides information on how to regulate and monitor stormwater management to protect people, property and life.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Canal Winchester Code – Part 11, Chapter 1179, 2010	Local	Planning & Zoning
<i>How does this reduce risk?</i> Provides information and regulations to prevent flooding.				
Wellhead Protection	Yes	Leiberman Wellfield Source Water Assessment and Protection Plan - 2006	Local	Public Service – Division of Water
This reduces risk by presenting workable strategies for preventing, detecting, and responding to ground water contamination within the drinking water source protection area.				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Canal Winchester and Violet Township CEDA Plan	Local	Development
<i>How does this reduce risk?</i> The Comprehensive Plan establishes a strategy to affect the immediate and long-range protection, enhancement, growth and development.				
Capital Improvement Plan	Yes	Resolution 22-046 – 11-2022	Local	Public Service
This reduces risk by identifying hazard mitigation projects and planning for their implementation				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	Canal Winchester Code – Part 11, Chapter 1177, 2005	Local	Planning & Zoning
This reduces risk by providing regulations to reduce the flood risks to new buildings and infrastructure				
Stormwater Management Plan	Yes	Stormwater Management Plan - 2016	Local	Public Service
this reduces risk by implementing ways to reduce runoff from rainwater that can cause flooding by overwhelming the City's stormwater systems				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	Yes	Ordinance 21-057 - 2021	Local	Public Service
This reduces risk by limiting access to hazard areas, guide growth to safe locations and provide efficient access for evacuation routing				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan This reduces risk by providing a guide for growth in the downtown area	Yes	Old Town Plan - 2017	Local	Development
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of the City of Canal Winchester to oversee and track development.

Table 9.6-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Planning & Zoning
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? • If yes, please describe	Yes	Zoning and land use maps
Describe the level of build-out in your jurisdiction.	N/A	

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Canal Winchester and their current responsibilities that contribute to hazard mitigation.

Table 9.6-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	<p>The Canal Winchester Planning and Zoning Commission shall have the responsibility to initiate amendments to the provisions of the zoning code and official zoning map and to review all proposed amendments of this zoning code and zoning map and to forward recommendations to Council.</p> <p>They also review all proposed development plans, and act upon applications for variances and conditional use permits in accordance with the zoning code. They administer the provisions of Canal Winchester's Subdivision Regulations in consideration of major subdivisions and make recommendations on platting to Council.</p> <p>Members:</p> <ul style="list-style-type: none"> • Joe Donahue - Chairman • Joe Wildenthaler - Vice Chair • Brad Richey - Secretary • Deborah McDonnell • Rick Deeds • Steve Palsgrove
Zoning Board of Adjustment	No	-
Planning Department	Yes	3 Employees
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Street Tree Advisory Board – 5 Members
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	23 Employees
Construction/Building/Code Enforcement Department	Yes	3 Employees
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Contract with Franklin County EMA, subscription-based electronic notification
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Department of Public Service
Mutual aid agreements	Yes	Agreements in place with neighboring entities to for road maintenance and water and sewer services
Human Resources Manual	No	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Development Director, Planning & Zoning Administrator
Engineers or professionals trained in building or infrastructure construction practices	Yes	Directors of Public Service, Construction Services
Planners or engineers with an understanding of natural hazards	Yes	Planning & Zoning Administrator
Staff with expertise or training in benefit/cost analysis	Yes	Finance Director

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Director of Construction Services, Planning & Zoning Administrator
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	-	-

Fiscal Capability

The table below summarizes financial resources available to the City of Canal Winchester.

Table 9.6-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Canal Winchester.

Table 9.6-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Events & Communications Coordinator
Personnel skilled or trained in website development	Yes	Events & Communications Coordinator, Finance Director and Information Technology Coordinator are all proficient in maintaining our website
Hazard mitigation information available on your website	Yes	Legislation adopting Hazard Mitigation Plan is available through website
Social media for hazard mitigation education and outreach	Yes	City has a social media presence on Facebook, Twitter, and YouTube
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Citizen commissions include Planning & Zoning Commission, Landmarks Commission & Street Tree Advisory Board

Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	Yes	City has FCEMA tornado sirens, has an alert subscription system through our website, and promotes the ALERT Franklin County program
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	City has FCEMA tornado sirens, has an alert subscription system through our website, and promotes the ALERT Franklin County program

Community Classifications

The table below summarizes classifications for community programs available to the City of Canal Winchester.

Table 9.6-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	03/3Y	6-29-20
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.6-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Geologic	Moderate

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.6.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes the NFIP statistics for the City of Canal Winchester.

Table 9.6-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Canal Winchester (C)	7	7	\$8,694.95	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Canal Winchester.

Table 9.6-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Undeveloped areas of woodlands and farm fields along Walnut Creek between Lithopolis Winchester Road, and Washington Street is prone to flooding during heavy rain events.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No N/A
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	A substantial damage determination has not been done since the NFIP effective date for the community. However zoning section 1177.03(l) provides direction for substantial damage determination.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None

NFIP Topic	Comments
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Planning and Zoning Department
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	We provide floodplain development permitting, boundary determination letters, GIS educational tools, plan review, inspections and engineering services. Some in house and others third party services.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Any reconstruction, rehabilitation, addition or other improvement to an existing structure in which the total cost equals or exceeds 50% of the market value before the start of construction for the improvement.
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Undetermined
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Zoning Code Section 1177. Most recent update was 4/4/2011.
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	There is a minimum freeboard requirement of 1.5' above BFE for residential and commercial construction.
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes. Site Plan Review is required for all development proposals. Typically, floodplain mitigation is reviewed with a no-rise certificate and placing fill within the developed area with compensatory storage is regulated.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.6.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial

building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

The tables below summarize the number of building permits issued for new construction and recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.6-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	53	0	89	0	121	1	93	0	72	0
Multi-Family	6	0	6	0	12	0	5	0	0	0
Other (commercial, mixed-use, etc.)	6	0	8	2	7	2	5	1	7	2
Total Permits Issued	77	0	103	2	235	3	103	1	79	2

Table 9.6-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Winchester Logistics (2019)	Industrial	2	PID 184-000532 & 184-003445	Zone AE 1% SFHA	Filed for LOMR with FEMA to remove/relocated SFHA on property.
Tenby - BD33 (2021)	Industrial	1	PID 184-003570	Zone AE 1% SFHA	Filed with FEMA to reclassify SFHA as shown
Canal Crossing (2020)	Industrial	2	PID 184-000879 & 184-003368	Zone AE 1% SFHA	Filed for LOMR with FEMA to remove/relocate SFHA on property.
Evans Farm – Canal Pointe (2022)	Industrial	2	PID 042-0411700 & 042-0411600	Zone A 1% SFHA	Once completed, filing with FEMA to establish elevations, and remove/relocate SFHA on property.
Turning Stone	Mixed Use	75	PID 184-003439	Inland Erosion	Construction in progress
Known or Anticipated Major Development in the Next Five (5) Years					
Winchester Crossing	Mixed Use	4	W. Waterloo St.	Inland Erosion	Anticipated within the next five years
Middletown Farms	Residential	250	Lithopolis Rd/Oregon Rd.	N/A	Anticipated within the next five years
Old Waterloo Redevelopment	Mixed Use	20	Hill Rd.	N/A	Anticipated within the next five years

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

COUNTY OF
Franklin

Canal Winchester (C)

Legend

- New Development
- County Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

Map Sources: Franklin County 2011/2012
Ohio Department of Public Safety 2012, ESRI
Series: Enviro 2 Townships (T) Village (V)
Some new development location may not be represented on this map.

9.6.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Canal Winchester's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Canal Winchester has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.6-2. City of Canal Winchester Hazard Area Extent and Location Map-Flood

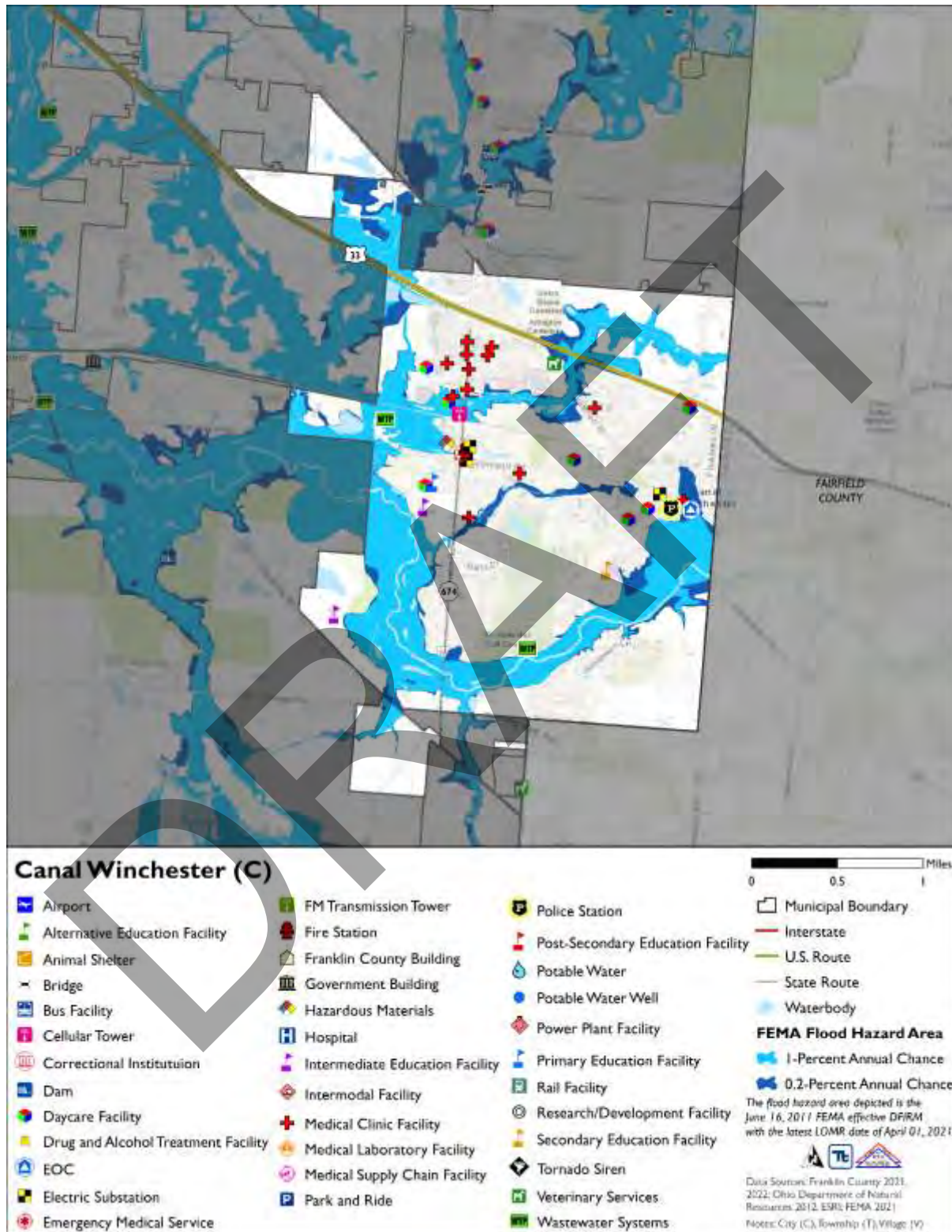


Figure 9.6-3. City of Canal Winchester Hazard Area Extent and Location Map-Inland Erosion

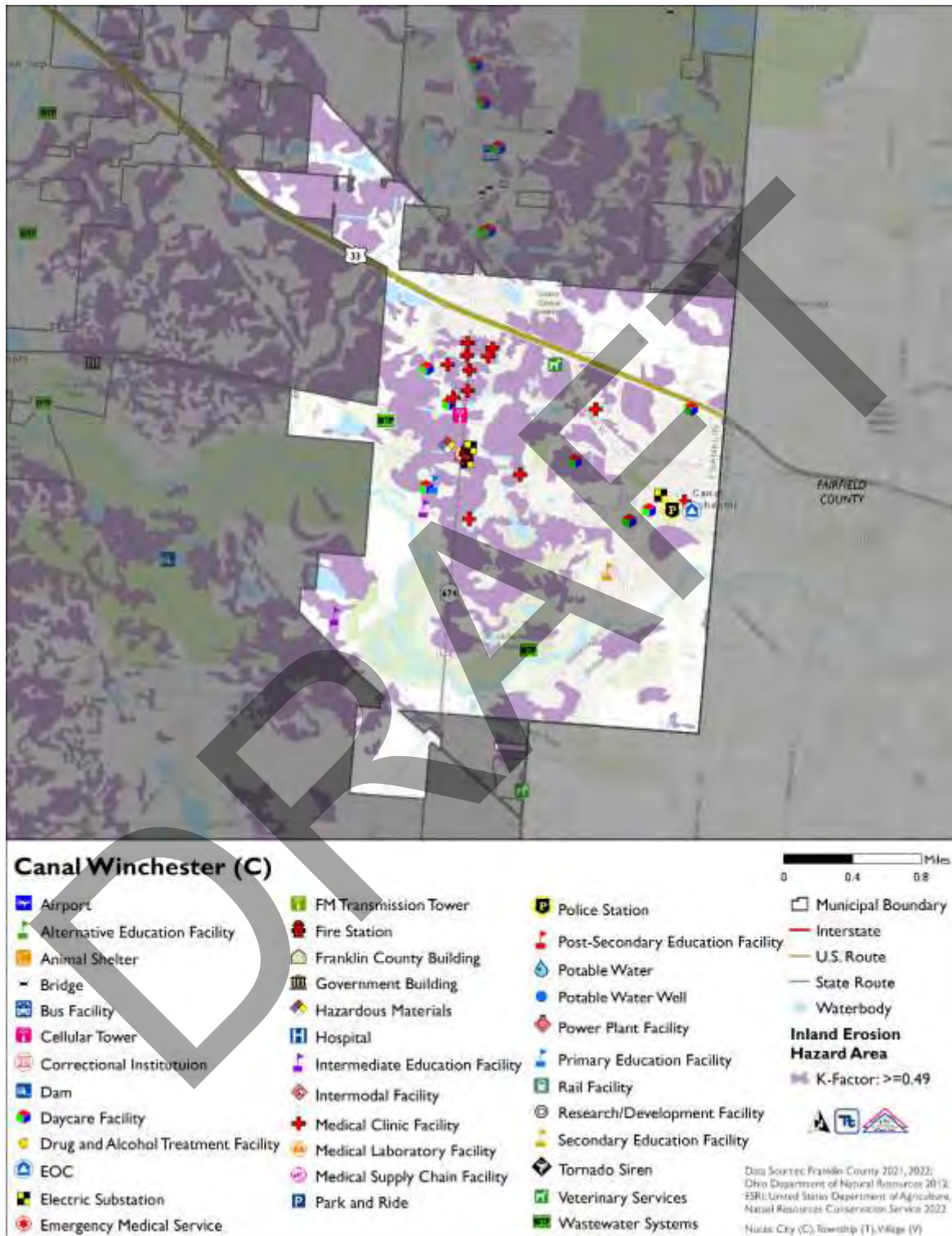
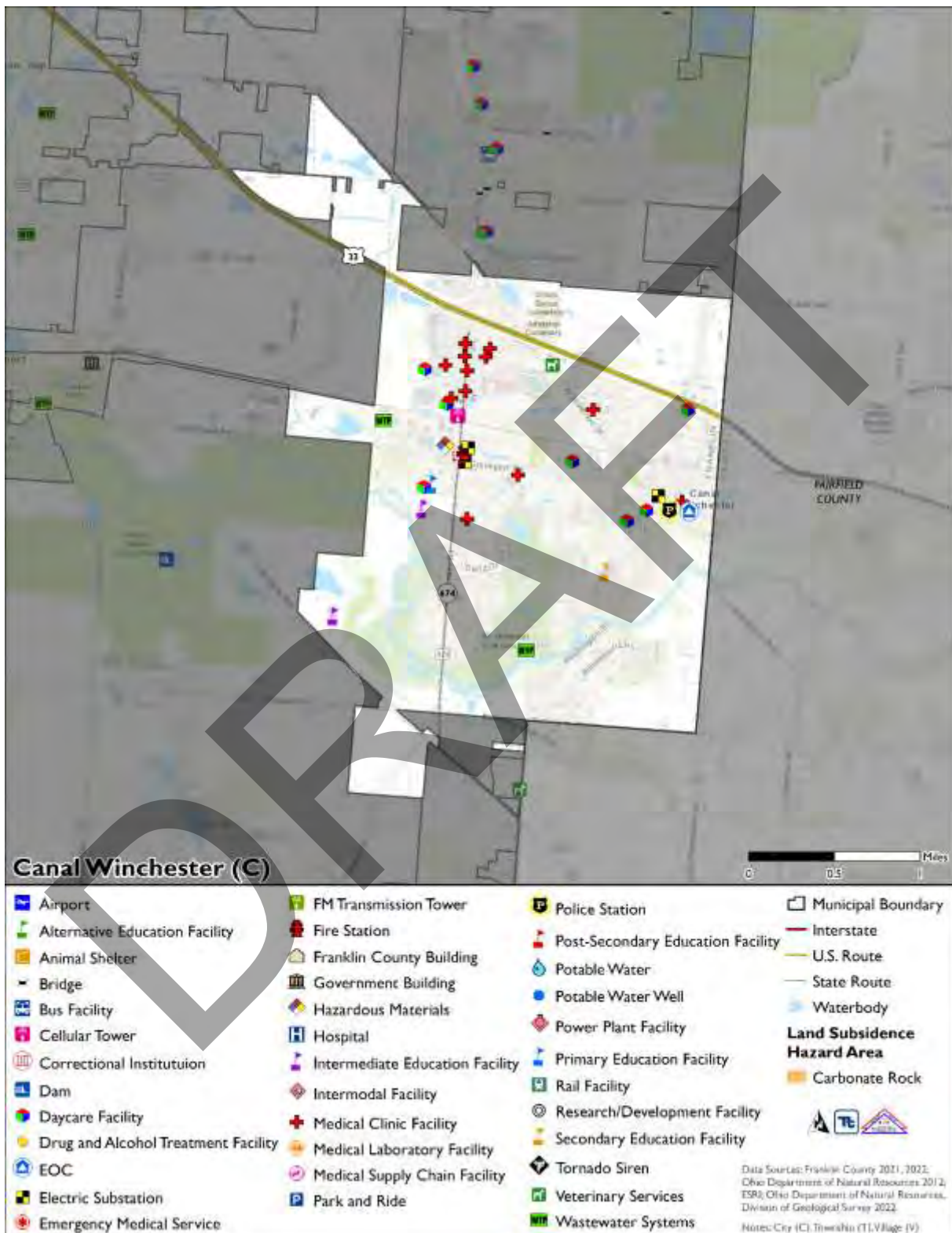


Figure 9.6-4. City of Canal Winchester Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Canal Winchester's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Canal Winchester experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.6-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The City of Canal Winchester did not incur any damages or losses from this event.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City of Canal Winchester did not incur any damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City of Canal Winchester did not incur any damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City of Canal Winchester did not incur any damages or losses from this event.
July 21, 2022	Thunderstorm	N/A	Cloud to ground lightening from thunderstorm activity resulted in an electrical surge at the Public Service Facility.	Equipment and component damage valued at approximately \$75,000

Hazard Ranking

This section provides the community specific identification of the primary hazards of concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community

capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Canal Winchester. The City of Canal Winchester reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Canal Winchester agreed with all hazard rankings.

Table 9.6-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperature	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.6-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Canal Winchester

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	4	3
0.2-Percent Annual Chance Flood Event Hazard Area	6	5
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	21	19
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Canal Winchester identified the following vulnerabilities within its community:

- There are three elevated water towers that do not have backup emergency power and communication. The water treatment plant and the communication towers are interrupted when severe weather causes local power outages.
- The City does not have emergency hazard sirens in place that are able to alert all residents in the City.
- Communication between City agencies is inconsistent due to dated and limited communication equipment. Informing City agencies of issues regarding hazards is time consuming and inefficient.
- Ahsbrook Road, which provides access to the Public Service Complex, becomes impassable during and after periods of heavy precipitation.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Cell Towers
 - The Goddard School
 - Canal Winchester City Hall
 - Waste Management of Ohio
- The City is experiencing issues with invasive species killing and outcompeting native species.
- The City does not have a Comprehensive Emergency Management Plan that integrates the current HMP.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

Figure 9.6-5. City of Canal Winchester Problem Areas



9.6.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.6-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Upgrade generator at water reclamation facility	Mayor's Office	Complete \$500,000 project was funded by existing Sewer Division funds along with a \$50,000 grant from Ohio EPA	No	-	-
Provide generator for water tower to maintain control system communication	Mayor's Office	No Progress	Yes	None of the three elevated water towers are equipped with backup emergency power and communication between the water treatment plant and the towers would be interrupted if severe weather caused local power outages. Once communications are lost, city would be unable to determine tower levels and be susceptible to loss of water system pressure, resulting in a loss of water for consumption and fire protection.	Public Service – Division of Water
Improve access to public service facility during flooding	Mayor's Office	Complete Easement was obtained from neighboring property at no cost to the City/.	No	-	-
Provide generator/backup pumps for priority pump stations	Mayor's Office	Complete Portable pump purchased for \$65,000 using existing Sewer Division funds.	No	-	-
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (35 facilities @ 3000 / 6 months)	Mayor's Office	No Progress	No	-	-

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Develop plan to have lightning arrestors installed on all lift stations. (70,000 / 1 year	Mayor's Office	No progress	No	-	-
Seek funding for purchase and installation of additional tornado sirens	Mayor's Office	No progress	Yes	Coverage area deficiencies	Mayor's Office
Seek permission & funding to acquire equipment to optimize interagency communications	Mayor's Office	Ongoing	Yes	Communications incompatibility	Mayor's Office

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Canal Winchester identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Canal Winchester has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Canal Winchester participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.6-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	-	X	-	-	-	-	X
Disease Outbreak	X	X	-	-	X	-	-	-	-	X
Drought	X	X	-	-	X	-	-	-	X	X
Earthquake	X	X	-	-	X	-	-	-	X	X
Extreme Temperature	X	X	-	-	X	-	-	-	X	X
Flood	X	X	-	-	X	-	-	-	X	X
Geologic	X	X	-	-	X	-	-	-	X	X
Invasive Species	X	X	-	-		X	-	-	-	X
Severe Summer Weather	X	X	-	-	X	-	-	-	X	X
Severe Winter Weather	X	X	-	-	X	-	-	-	X	X
Tornado	X	X	-	-	X	-	-	-	X	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.6-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Canal Winchester will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.6-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Canal Winchester-001	Generator Installation	Problem: There are three elevated water towers that do not have backup emergency power and communication. The water treatment plant and the communication towers are interrupted when severe weather causes local power outages. Solution: Provide generator for water tower to maintain control system communication	Drought, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	6	1 Year	Department of Public Service, Division of Water	City Budget, BRIC, HMGP	City will maintain use of water for consumption and fire protection.	\$40,000	High	SIP	SP
2023-Canal Winchester-002	Installation of Emergency Sirens	Problem: The City does not have emergency hazard sirens in place that are able to alert all residents in the City. Solution: The City will seek funding for purchase and installation of additional emergency sirens.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic,	4	1 Year	Department of Public Service	City Budget, HMGP	Residents in the City will have more time to shelter from tornado events.	>\$100,000	High	SIP	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Severe Summer Weather, Severe Winter Weather, Tornado									
2023-Canal Winchester-003	Installation of Communication Equipment	<p>Problem: Communication between City agencies is inconsistent due to dated and limited communication equipment. Informing City agencies of issues regarding hazards is time consuming and inefficient.</p> <p>Solution: Seek permission & funding to acquire equipment to optimize interagency communications for hazards of concern.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	6	1 Year	Department of Public Service, Mayors Office	City Budget, HMGP, BRIC	The City will be able to share information regarding hazards of concern in a quick and time efficient manner.	Medium	High	SIP	ES
2023-Canal Winchester-004	Ashbrook Road Flood Study	<p>Problem: Ashbrook Road, which provides access to the Public Service Complex, becomes impassable during and after periods of heavy precipitation.</p> <p>Solution: The City will conduct a flood study with an engineer and will</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	1 Year	City Department of Public Service, Engineer	City Budget, FMA, HMGP, BRIC, CDBG	The Road will become passable during precipitation events.	TBD after Flood Study	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		come up with a cost effective solution to mitigate the flooding problem and will implement the solution.										
2023-Canal Winchester-005	Canal Winchester Flood Vulnerability Evaluation	<p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Cell Towers The Goddard School Canal Winchester City Hall Waste Management of Ohio <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers 	Flood	6	Less than 5 Years	City Department of Public Service, Engineer	City Budget, FMA, HMGP, BRIC, CDBG	The City's critical facilities will be protected to the 500-year flood level.	TBD after Feasibility assessment	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Once the most cost-effective option is identified, the Town will carry out the option.										
2023-Canal Winchester-006	Invasive Species Eradication Program	<p>Problem: The City is experiencing issues with invasive species killing and outcompeting native species.</p> <p>Solution: The City will work with state agencies on developing quarantine, control, and eradication programs for invasive species to protect native species.</p>	Invasive Species	1	2 Years	City Administration	City Budget, HMGP	The City's native species will become better protected.	\$2,000	High	LPR	PP
2023-Canal Winchester-007	Comprehensive Emergency Management Plan	<p>Problem: The City does not have a Comprehensive Emergency Management Plan that integrates the current HMP.</p> <p>Solution: The City will develop a Comprehensive Emergency Management Plan that integrates the current HMP. This will include indicating and designating where emergency vaccination stations, emergency shelters and heating/cooling stations are located.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	1	2 Years	City Administration, Mayor	City Budget, HMGP	The City will be better prepared for emergencies.	\$2,000	High	LPR	ES



**Mitigation initiative is related to a critical facility and/or community lifeline*

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.*

CRS Category:

- *Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.6-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Canal Winchester-001	Generator Installation	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-Canal Winchester-002	Installation of Emergency Sirens	1	1	1	1	1	1	1	0	1	1	0	1	1	0	11	High
2023-Canal Winchester-003	Installation of Communication Equipment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Canal Winchester-004	Ashbrook Road Flood Study	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2023-Canal Winchester-005	Canal Winchester Flood Vulnerability Evaluation	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2023-Canal Winchester-006	Invasive Species Eradication Program	0	1	1	1	1	1	1	1	1	1	0	1	1	0	11	High
2023-Canal Winchester-007	Comprehensive Emergency Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.7 CLINTON TOWNSHIP

This section presents the jurisdictional annex for the Clinton Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Clinton Township participated in the planning process, an assessment of the Clinton Township's risk and vulnerability, the different capabilities used in the Clinton Township, and an action plan that will be implemented to achieve a more resilient community.

9.7.1 Hazard Mitigation Planning Team

The Clinton Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Clinton Township departments, including the Fire Chief. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.7-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Eric Walker/ Township Administrator	Name/Title:	Brian Fraley /Fire Chief
Address:	3820 Cleveland Ave. Columbus, OH 43224	Address:	3820 Cleveland Ave Columbus, OH 43224
Phone Number:	614-471-1479	Phone Number:	614-471-1479
Email:	ewalker@clintontownship.org	Email:	bfraley@clintontownship.org:
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Franklin County		
Address:	150 S Front St Columbus, OH 43215		
Phone Number:	614-525-5647		
Email:	mybrown@franlincountyohio.gov		
Additional Contributors:			
Name/Title:	Matt Huffman/Township Administrator		
Method of Participation:	Provided key input in the planning process		

9.7.2 Municipal Profile

The Clinton Township is in the northern part of Franklin County and is bordered by Sharon Township to the north, Perry Township to the west, Mifflin Township to the east and Franklin and Montgomery Townships to the south. Clinton Township consists of many scattered "islands" of land surrounded by the city of Columbus.

According to the American Community Survey, the 2021 population for the Clinton Township was 4,449, an 8.27 percent increase from the 2010 Census population of 4,109. Data from the 2021 American Community Survey indicates that 3.1 percent of the population is 5 years of age or younger and 9.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.7.3 Jurisdictional Capability Assessment and Integration

The Clinton Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Clinton Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Clinton Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.7-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Building Code & Residential Code of Ohio	Local & County	SafeBuilt/ Matt Brown, Planning Administrator
<i>Reduces loss of life and property by minimizing the impact of disasters</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1, 2, and 3 family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to counties building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, Mechanical and Planning uses. The Residential code gives builders a pre identified checklist prior to construction leading to safer actions to accomplish goals.				
Zoning/Land Use Code	Yes	Chapter 519 Township Zoning/Title 5 township Zoning; Franklin County Zoning Resolution, Original adopted November 12, 1948, Amended and Readopted October 11, 2022	County	Matt Brown, Planning Administrator
<i>Reduces loss of life and property by minimizing the impact of disasters</i> Helps to ensure appropriate separations and buffering between incompatible land uses. Prohibits development in floodways and requires development in floodway fringe areas to be designed so as to reduce risk. Requires a conditional use permit for floodplain development. Requires new developments and redevelopments to provide stormwater controls to reduce flooding. Includes stream setbacks in certain watersheds. Environmental constraints are considered when reviewing rezoning requests. Allows for conservation/cluster development to protect sensitive areas.				
Subdivision Ordinance	Yes	Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012	County	Matt Brown, Planning Administrator
<i>Reduces loss of life and property by minimizing the impact of disasters</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions.				
Site Plan Ordinance	No	-	-	-
<i>Reduces loss of life and property by minimizing the impact of disasters</i>				
Stormwater Management Ordinance	Yes	Ohio Administrative Code Rule 901:10-3-11 Storm Water Permits and individual	County	Matt Brown, Planning Administrator
<i>Reduces loss of life and property by minimizing the impact of disasters</i> Shows best management practices for stormwaters and gives the steps for members to receive their permit requirements and construction requirements.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
<i>Consider the following:</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<ul style="list-style-type: none"> Are environmental systems that protect development from hazards identified and mapped? Do environmental policies maintain and restore protective ecosystems? Do the ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains? Do environmental policies provide incentives to development that is located outside protective ecosystems? 				
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Section 5502.21- 5502.27 Emergency Management Definitions/Countywide Emergency Management Agency, September 29th, 1999	Franklin County EMA	Franklin County EMA
<i>Coordinates county-wide emergency planning, training, warning, response and recovery</i> Gives clear definitions on emergency management titles and demonstrates the roles/job actions that may take place at the agency; gives set standards for emergency management goals and gives direct definitions on important emergency management aspects				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	*Clinton-Mifflin Land Use Plan *Cleveland Avenue Streetscape 2020 *Clinton West Neighborhood Plan *Clinton Township Redevelopment and Community Sustainability Plan	Local	Eric Walker, Township Administrator
<i>How does this reduce risk?</i> Reduces loss of life and property by minimizing the impact of disasters				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	Section 1521 Floodplain Management Activities. January 1st, 2016 Columbus Watershed Management/Franklin County Floodplain Management team	County	Matt Brown, Planning Administrator
<i>Reduces loss of life and property by minimizing the impact of disasters</i> Reduces the risk of bad drinking water and allows for safe housing in nonhazardous areas.				
Stormwater Management Plan	Yes	Franklin County Storm Water Manual. March 13th, 2012	County	Matt Brown, Planning Administrator
<i>Reduces loss of life and property by minimizing the impact of disasters</i> The purpose of the Manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Consider the following: <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? 				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Clinton Township to oversee and track development.

Table 9.7-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	-
If you do not issue development permits, what is your process for tracking new development?	N/A	County does this for Township.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Clinton Township and their current responsibilities that contribute to hazard mitigation.

Table 9.7-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Superintendent and four FTE



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Construction/Building/Code Enforcement Department	Yes	One Code Compliance
Emergency Management/Public Safety Department	Yes	Fire and Police Departments
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Tornado siren
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Public Works
Mutual aid agreements	Yes	Fire and Police Departments
Human Resources Manual	Yes	-
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	Franklin County Engineer
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	Fire and Police Chiefs
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	-	-

Fiscal Capability

The table below summarizes financial resources available to the Clinton Township.

Table 9.7-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Clinton Township.

Table 9.7-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Deborah Smothers
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Tornado siren
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Clinton Township.

Table 9.7-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	2018
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.7-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.7.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Clinton Township.

Table 9.7-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Clinton (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of the NFIP information for the Clinton Township.

Table 9.7-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Roadways – no list maintained
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? 	No

NFIP Topic	Comments
<ul style="list-style-type: none"> How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Total cost of repair is 50 percent or more of the structure's market value before the disaster occurred
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No – Franklin County would handle
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	Unknown
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	Unknown
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Do not have flood damage prevention ordinance
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Unknown
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Franklin County
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Not eligible

9.7.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.7-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	County Tracks									
Multi-Family										
Other (commercial, mixed-use, etc.)										
Total Permits Issued										

Table 9.7-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.7.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Clinton Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Clinton Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.7-1. Clinton Township Hazard Area Extent and Location Map-Flood

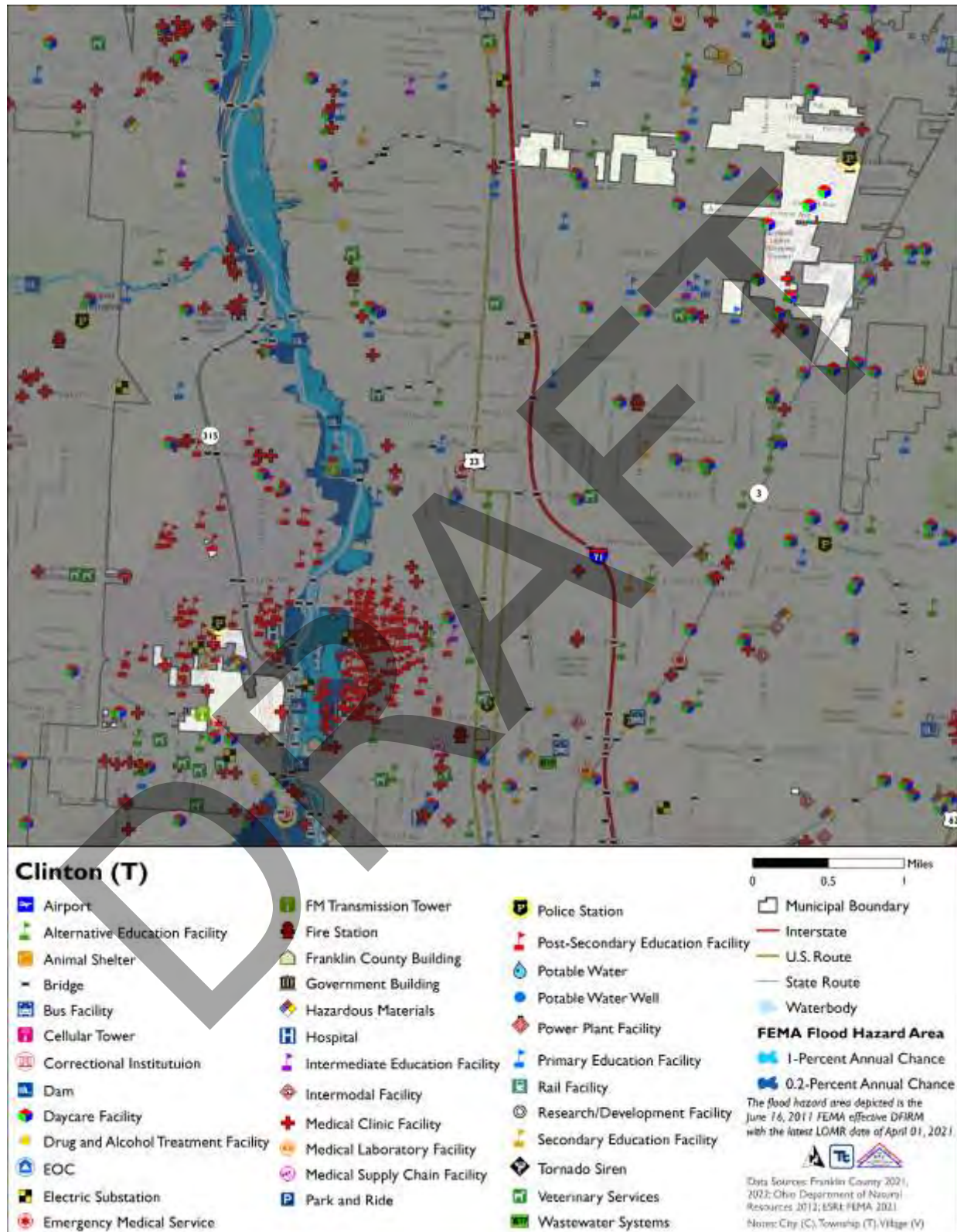


Figure 9.7-2. Clinton Township Hazard Area Extent and Location Map-Inland Erosion

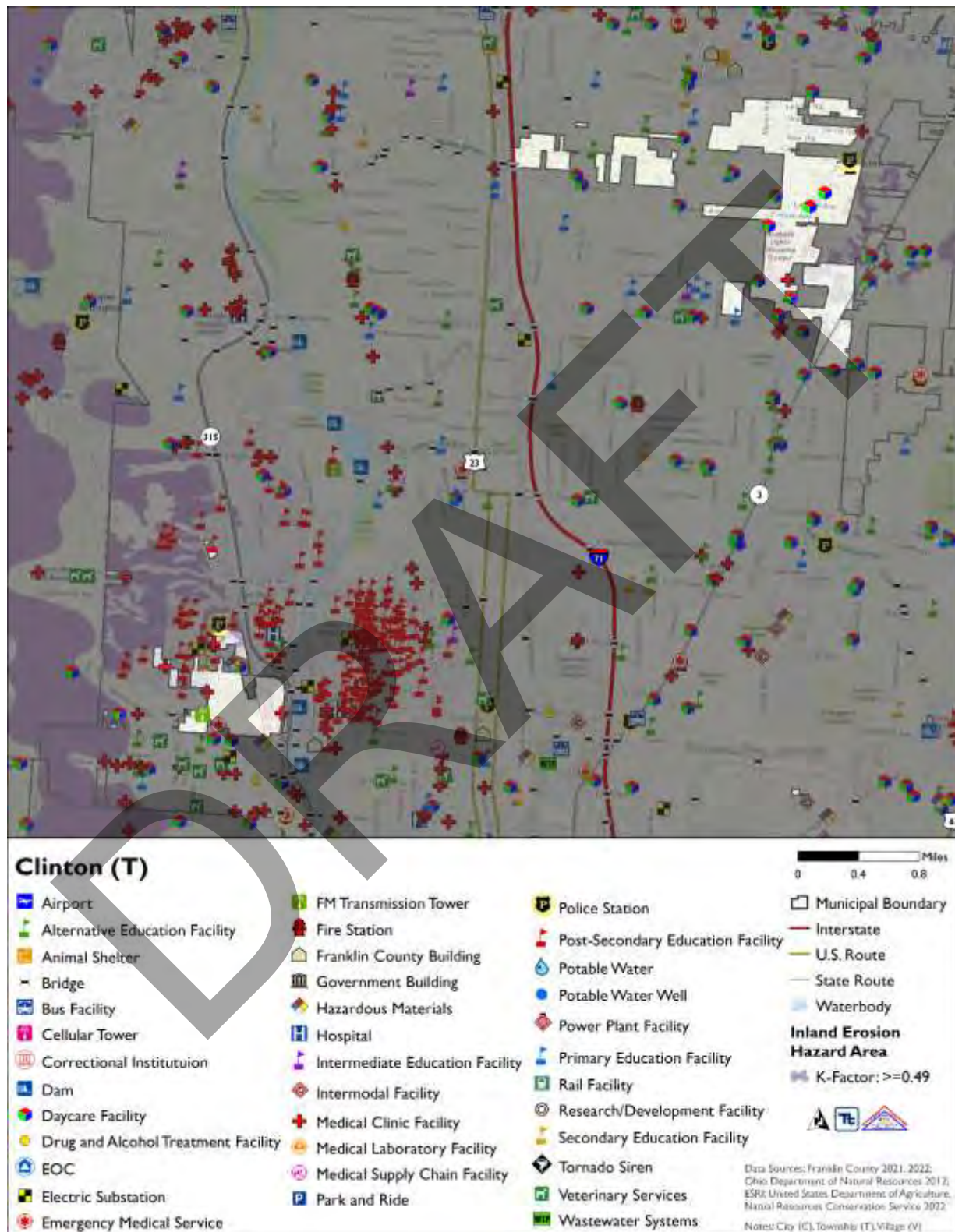
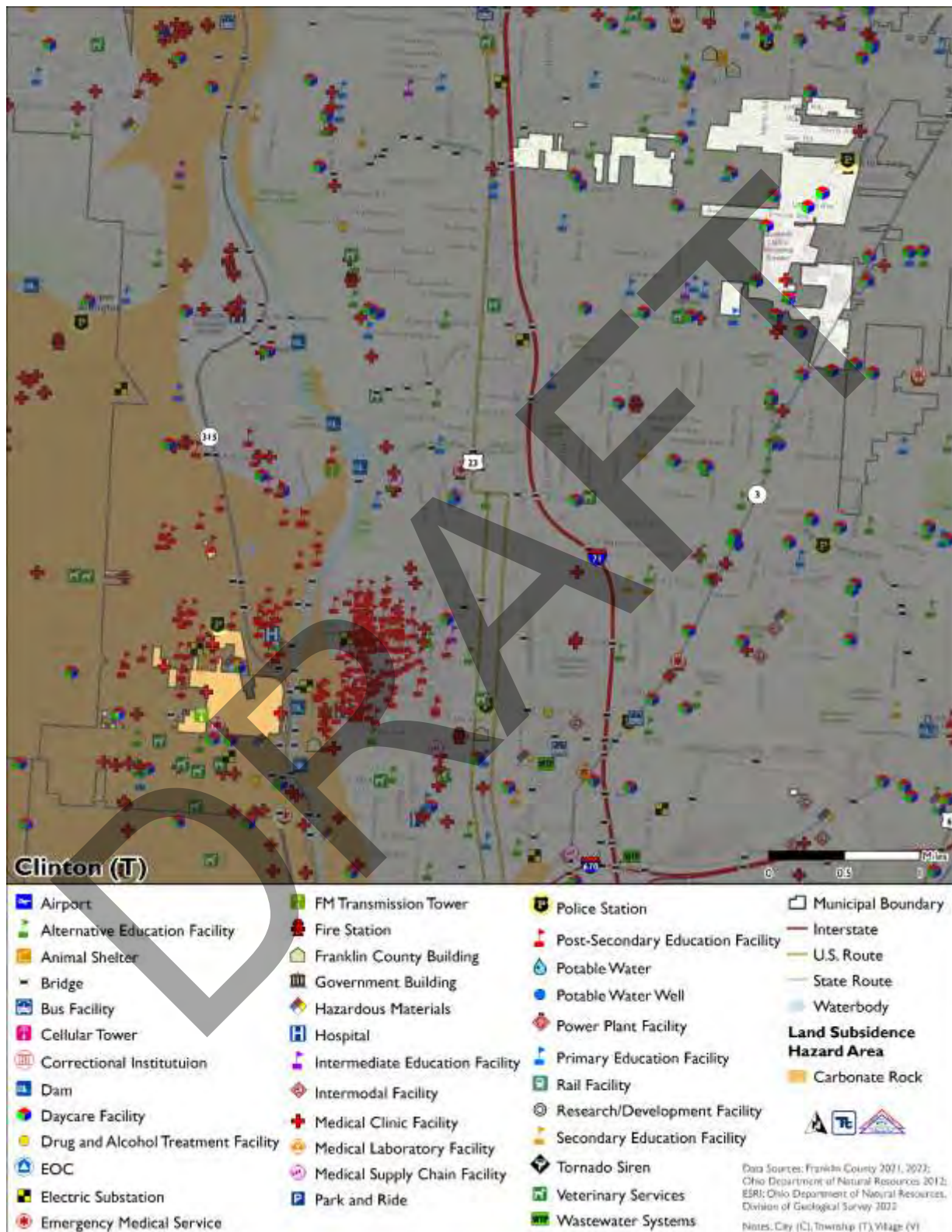


Figure 9.7-3. Clinton Township Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Township of Clinton's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Township of Clinton experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.7-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Clinton Township did not incur any damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Clinton Township did not incur any damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	Clinton Township did not incur any damages or losses from this event.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; and community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Clinton Township. The Clinton Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Clinton Township indicated the following:

- The Township changed drought from low to medium due to increased drought events.
- The Township changed Flood from medium to low due to limited flooding issues.

Table 9.7-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Medium
Earthquake	Low
Extreme Temp	Medium
Flood	Low
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.7-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Township of Clinton

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	1	-
Subsidence (Karst/Carbonate Rock) Hazard Area	5	4
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	2	2

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Township of Clinton identified the following vulnerabilities within its community:

- The Township does not provide information on the hazards of concern to residents, including information regarding flood insurance.
- The Township does not currently have hazard mitigation information on their website to help residents to prepare for and mitigate the hazards of concern.

- The Township does not have a Post-Disaster Recovery Plan that integrates the current HMP.

9.7.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.7-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for public information including outreach projects and technical assistance to property owners. (15,000 / 1 year)	Township Trustee's Office	Ongoing	No	-	-
Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (No cost, ongoing)	Township Trustee's Office	Ongoing	No	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Clinton Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Clinton Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Clinton Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.7-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	-	-	X	X	-	X	-	-	X
Disease Outbreak	-	-	-	X	X	-	X	-	-	X
Drought	-	-	-	X	X	-	X	-	-	X
Earthquake	-	-	-	X	X	-	X	-	-	X
Extreme Temp	-	-	-	X	X	-	X	-	-	X
Flood	-	-	-	X	X	-	X	-	-	X
Geologic	-	-	-	X	X	-	X	-	-	X
Invasive Species	-	-	-	X	X	-	X	-	-	X
Severe Summer Weather	-	-	-	X	X	-	X	-	-	X
Severe Winter Weather	-	-	-	X	X	-	X	-	-	X
Tornado	-	-	-	X	X	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.7-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Township of Clinton will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.7-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Clinton Township-001	Public Information Outreach/ Technical Assistance	Problem: The Township does not provide information on the hazards of concern to residents, including information regarding flood insurance. Solution: The Township will seek funding for public information including outreach projects and technical assistance to property owners to complete DIY mitigation projects to protect property from the hazards.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	4, 5	1 year	Township Trustee's Office	FEMA, HMGP	Township residents will become more aware of hazards of concern and will be provided technical assistance as needed.	\$15,000	High	EAP	PI, PR
2023-Clinton Township-002	Update website to include hazard outreach	Problem: The Township does not currently have hazard mitigation information on their website to help residents to prepare for and mitigate the hazards of concern. Solution: The Township will work with Franklin County Emergency Management and Homeland Security to develop online public outreach and notification system regarding all natural hazards, and the County's susceptibility to those hazards, and will make available on a website.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	6 months	Township Trustee's Office	Township, HMGP	Township residents will be able to prepare for hazards of concern by visiting the website.	\$500	High	EAP	PI
2023-Clinton Township-003	Post-Disaster Recovery Plan	Problem: The Township does not have a Post-Disaster Recovery Plan that integrates the current HMP.	Dam/Levee, Disease Outbreak, Drought,	1	1 Year	Township Trustee's Office	Township, HMGP	Township will be better prepared to	\$2,000	High	EAP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The Township will develop a Post-Disaster Recovery Plan that integrates the hazards of concern from the current HMP.	Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado					handle post disaster clean up.				

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.7-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023- Clinton Township- 001	Public Information Outreach/Technical Assistance	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Clinton Township-002	Update website to include hazard outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Clinton Township-003	Post-Disaster Recovery Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.8 CITY OF COLUMBUS

This section presents the jurisdictional annex for the City of Columbus that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Columbus participated in the planning process, an assessment of the City of Columbus's risk and vulnerability, the different capabilities used in the City of Columbus, and an action plan that will be implemented to achieve a more resilient community.

9.8.1 Hazard Mitigation Planning Team

The City of Columbus identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Columbus departments, including the Floodplain Administrator and the Department of Public Utilities. The Department of Public Utilities' Emergency Preparedness Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.8-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Stephen Kranz, Department of Public Utilities' Emergency Preparedness Chief	Name/Title:	Mike Fielding, Division of Fire's Emergency Preparedness Chief
Address:	910 Dublin Road, Columbus, Ohio 43215	Address:	3639 Parsons Ave., Columbus, Ohio 43207
Phone Number:	(614) 645-6771	Phone Number:	(614) 221-3132
Email:	srkranz@columbus.gov	Email:	MJFielding@Columbus.gov
NFIP Floodplain Administrator			
Name/Title:	Renee VanSickle, P.E., CFM; Floodplain Administrator and Stormwater Engineer		
Address:	1250 Fairwood Avenue Columbus, OH 43206		
Phone Number:	(614) 645-7385		
Email:	rmvansickle@columbus.gov		
Additional Contributors:			

Name/Title:	Kristian Fenner, Deputy Director, Division of Power
Method of Participation:	Assisted in the completion of Worksheet A
Name/Title:	Rob Priestas, Director, Division of Sewers and Drains
Method of Participation:	Assisted in the completion of Worksheets A, B
Name/Title:	Alana Shockey, Deputy Director, Regulatory Compliance and Sustainability
Method of Participation:	Assisted in the completion of Proposed Hazard Mitigation Initiatives

9.8.2 Municipal Profile

The City of Columbus is located in the center of Franklin County and encompasses or is bordered by Upper Arlington and parts of Clinton Township to the west, City of Bexley to the southeast, parts of Sharon and Mifflin Townships to the north and northeast. Due to Columbus annexing parts of Townships and Villages, the City encompasses many additional small parts of Townships and Villages. Columbus is the Ohio State Capital and is the most populated City in all of Ohio. The confluence of the Scioto and Olentangy rivers is just northwest of Downtown Columbus. Several smaller tributaries course through the Columbus metropolitan area, including Alum Creek, Big Walnut Creek, and Darby Creek.

According to the American Community Survey, the 2020 population for the City of Columbus was 873,569, an 11 percent increase from the 2010 Census population of 787,033. Data from the 2020 U.S. Census indicate that 7.1 percent of the population is 5 years of age or younger and 10.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.8.3 Jurisdictional Capability Assessment and Integration

The City of Columbus performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events
-

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an

opportunity for the City of Columbus to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Columbus provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.8-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	4113.29	LOCAL	Columbus Building and Zoning
<i>How does this reduce risk?</i> Sets requirements for structures located in special flood hazard areas. (1150.27) The department shall in no case grant any permit for the construction, alteration, or use of any building, structure or premises in the flood plain, as determined by the flood profile and flood boundary and floodway map on file in the department without a copy of the appropriate certificate of zoning clearance issued to the applicant, stating that said building, structure or premises, as proposed to be constructed, altered, or used, would not be in violation of any regulation established by Chapter 3385 of the Zoning Code.				
Zoning/Land Use Code	Yes	4123.51	LOCAL	Columbus Building Zoning
<i>How does this reduce risk?</i> Sets requirements for structures located in special flood hazard areas. (1150.27) Construction documents (plans and specifications) and permits for structures to be located in the special flood hazard area shall comply with C.C. 1150 in addition to the provisions of Section 4123.50 through 4123.61, inclusive. For the purpose of Flood Plain Development only, the terms, phrases, words and their derivations as defined in C.C. Chapters 1150 shall apply. For the purpose of flood plain development only, where a conflict occurs, the most restrictive definition takes precedence.				
Subdivision Ordinance	Unknown	-	-	-
<i>How does this reduce risk?</i> N/A				
Site Plan Ordinance	Unknown	-	-	-
<i>How does this reduce risk?</i> N/A				
Stormwater Management Ordinance	Yes	1145.80-1145.89	Local	Columbus DPU
<i>How does this reduce risk?</i> Regulations governing stormwater discharges from premises within the City of Columbus and where applicable, from premises outside of the City of Columbus, which are tributary to the sewer system.				
Post-Disaster Recovery/ Reconstruction Ordinance	Unknown	-	-	-
<i>How does this reduce risk?</i> N/A				
Real Estate Disclosure	Unknown	-	-	-
<i>How does this reduce risk?</i> N/A				
Growth Management	Unknown	-	-	-
<i>How does this reduce risk?</i> N/A				
Environmental Protection Ordinance	Unknown	1150.00, 1115.00	Local- Columbus	Columbus DPU
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Columbus Stormwater drainage manual and floodplain code 1150 provide supportive risk reduction for floodplain management and watershed protection.				
Flood Damage Prevention Ordinance	Yes	1150.00	Local – Columbus	Columbus DPU
<i>How does this reduce risk?</i> It makes people put the lowest floor of a building in the 100-year floodplain at least 1.5 feet above the BFE to reduce flooding risk. It only allows 4 uses in the floodway and no structures for human habitation are allowed in the floodway. That reduces risk by not allowing people to live in the Floodway which is the most dangerous part of the 100-year floodplain.				
Wellhead Protection	Yes	1115.01	Local- Columbus	Columbus DPU
<i>How does this reduce risk?</i> Safeguard the public health, safety, and welfare by establishing a wellfield protection ordinance to protect the public water supply of the City of Columbus. This shall be accomplished by implementing regulations that control activities in defined Wellfield Protection Areas.				
Emergency Management Ordinance	Yes	ORC: 5502.26	State- Ohio Revised Code	FCEMHS
<i>How does this reduce risk?</i> Establishes All-hazards emergency operations planning countywide.				
Climate Change Plan	Yes	Date: December 2021	Local- Columbus	Mayor's Office, DPU
<i>How does this reduce risk?</i> Outlines Columbus' goals, strategies, and mitigation efforts to climate change.				
Other	Yes	Historic Preservation Ordinance (3101.00)	Local- Columbus	City Council
Planning Documents				
Comprehensive/Master Plan	Yes	Columbus Comprehensive Plan,	Local- City of Columbus	Columbus Planning Division
<i>How does this reduce risk?</i> The plan is intended to serve as a guide with which to protect and enhance the quality of life in Columbus. It accomplishes this by fostering orderly, manageable, and cost-effective growth and establishing a framework for future land use decisions.				
Capital Improvement Plan	Yes	Capital Improvement Program, 2022-2027	Local	Columbus Finance and Management
<i>How does this reduce risk?</i> Identifies, prioritizes, and optimizes the financing of Capital projects and links strategic and comprehensive plans with fiscal capabilities. Allows the City to view all potential infrastructure projects and assess how they would impact the community.				
Disaster Debris Management Plan	Unknown	-	-	-
<i>How does this reduce risk?</i> N/A				
Floodplain Management or Watershed Plan	Yes	Watershed Management Program	Local- Columbus	Columbus DPU (Division of Water) and Recreation & Parks
<i>How does this reduce risk?</i> Watershed plan program provides framework and planning structure for protecting the watershed for the City of Columbus Department of Public Utilities.				
Stormwater Management Plan	Yes	Stormwater Drainage Manual, 2022	Local- Columbus	Columbus DPU (Division of Sewers and Drains)
<i>How does this reduce risk?</i> Provides framework and planning for stormwater management for the City of Columbus Department of Public Utilities.				
Open Space Plan	Unknown	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
N/A				
Urban Water Management Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Habitat Conservation Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Economic Development Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Shoreline Management Plan (Land Stewardship Program)	Yes	Land Stewardship Program, 2022	Local- Columbus	Columbus DPU and Columbus Parks and Rec.
How does this reduce risk?				
Maintaining a healthy native shoreline buffer adjacent to the water protects reservoir health. Vegetated Shoreline Buffers are a widely employed water resource management tool and naturally provide environmental benefits such as protecting water quality, stabilizing shoreline soils, mitigating flood flows, and providing habitat for fish and wildlife.				
Community Wildfire Protection Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Community Forest Management Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Transportation Plan	Yes	Columbus Multimodal Thoroughfare Plan, 2019	Local	Public Service
How does this reduce risk?				
The Thoroughfare Plan includes updates to Columbus City Codes to ensure all Connect Columbus policy and Multimodal Thoroughfare Plan recommendations are reflected in Columbus City Codes and planning policies. Provides expansion of transportation modalities for future population growth.				
Agriculture Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Climate Action/ Resiliency/Sustainability Plan	Yes	Columbus Climate Action Plan, 2021	Local- Columbus	Mayor's Office, Columbus DPU
How does this reduce risk?				
It emphasizes the need to build a Columbus that is resilient to global climate change while mitigating future risks.				
Tourism Plan	Unknown	-	-	-
How does this reduce risk?				
N/A				
Business/ Downtown Development Plan	Yes	Downtown Strategic Plan, 2010	Local	Columbus Downtown Development Corporation
How does this reduce risk?				
Provides structure for development of City of Columbus Downtown and reinforces the city codes for development in floodplain.				
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Franklin County Emergency Operations Plan	Local- Franklin County	FCEMHS
How does this reduce risk?				
Franklin County Emergency Operations Plan is an all-hazards operations plan maintained by FCEMHS. It is the principal guide for mitigating emergencies and disasters, ensuring the protection of health, safety, and property of the public and aiding in recovery operations for the agencies and jurisdictions in the community. It is intended to facilitate multiple-agency and multiple-jurisdictional coordination, particularly				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
among local, state, and federal agencies in emergency management and establish a framework for an effective system of comprehensive emergency management.				
Continuity of Operations Plan	Unknown	-	-	-
How does this reduce risk? N/A				
Strategic Recovery Planning Report	Unknown	-	-	-
How does this reduce risk? N/A				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Unknown Date	Local- Franklin County	FCEMHS
How does this reduce risk? Study that assesses most likely hazards and risk to Columbus/Franklin County.				
Post-Disaster Recovery Plan	Unknown	-	-	-
How does this reduce risk? N/A				
Public Health Plan	Yes	Columbus Public Health Strategic Plan, 2022-2024	Local- Columbus	Columbus Public Health
How does this reduce risk? Columbus Public Health will expand the use of data to measure outcomes and impact, foster innovation, expand partnerships and engagement in the community, and invest in its workforce. The strategic plan assists in setting priorities and setting an operational overview for the Department's various Divisions to establish an understanding of the risks and potential complications that may be anticipated.				
Other	-	-	-	-
How does this reduce risk? N/A				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Columbus to oversee and track development.

Table 9.8-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Columbus Department of Development, City Zoning and Building
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	We don't have floodplain development permits per se. What we have is that we ask for a bunch of floodplain information on our plans & once they have met all the Columbus floodplain requirements we put "No Comments".
Do you have a buildable land inventory? • If yes, please describe	Yes	Land Bank Center-City of Columbus and Franklin County Land Banks
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Columbus and their current responsibilities that contribute to hazard mitigation.

Table 9.8-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Unknown	City of Columbus Development-The Planning Division is responsible for neighborhood planning, commercial overlays, boards, and commissions (Downtown, University District and East Franklinton), historic preservation, annexation, and public art.
Zoning Board of Adjustment	Yes	Columbus Board of Zoning Adjustment decide appeals from any persons affected by any order, requirement, decision, or determination made by the director in the administration or enforcement of this Zoning Code.
Planning Department	Yes	Columbus Department of development/ Development Commission- The Development Commission shall have all the powers, authority and duties granted to it by ordinances of council, and by Section 713.02 of the Ohio Revised Code, to the extent that the same are not in conflict with the Columbus City codes, the charter, or with ordinances or resolutions heretofore enacted by council. The Development Commission shall also serve as an advisory body to the Director and the city council in matters related to the preparation, execution and administration of urban renewal development, rehabilitation, and conservation plans.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Columbus Economic Development Division
Public Works/Highway Department	Yes	City of Columbus Public Service Department, manages city of Columbus roads, refuse, recycling, street sweeping, and snow/ice removal
Construction/Building/Code Enforcement Department	Yes	City of Columbus Building and Zoning Services
Emergency Management/Public Safety Department	Yes	Perform securities vulnerabilities assessments
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	FCEMHS- Mass notification (Everbridge), Outdoor tornado warning sirens
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	City of Columbus, Department of Public Utilities- Division of Sewers and Drains
Mutual aid agreements	Yes	OHWARN. Mutual aid and assistance agreements such as Water/Wastewater Agency Response Networks (WARNs) help local jurisdictions respond to incidents that call for resources beyond the capability of a local utility. The OH WARN Mutual Aid Agreement identifies the administration of the program, describes how to access mutual aid/assistance, specifies reimbursement procedures for the use of resources, and authorizes the creation of OH WARN Operational Plan.
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	Unknown if city has this type of trained personnel.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Construction personnel through Columbus Building and Zoning and Department of Finance and Management

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Planners or engineers with an understanding of natural hazards	No	Unknown
Staff with expertise or training in benefit/cost analysis	Yes	Columbus Department of Finance and Management manages costs/benefit analysis for the City of Columbus.
Professionals trained in conducting damage assessments	No	Unknown
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Columbus DPU- Manager, GIS Analysts and Technicians
Environmental scientist familiar with natural hazards	No	Unknown
Surveyor(s)	No	Unknown
Emergency Manager	-	-
Grant writer(s)	Unknown	City of Columbus Department of Finance and Management has a Grants management office, which coordinates financial and regulatory aspects of the following grants: Community Development Block Grant (CDBG), the HOME Investment Partnerships Program (HOME), the Emergency Shelter Grant (ESG), the Housing Opportunities for Persons with AIDS Grant (HOPWA), the Neighborhood Stabilization Program (NSP), and the HOME-American Rescue Plan Program (HOME-ARP)
Resilience Officer	Yes	DPU maintains Sustainability And Regulatory Compliance office, managing Sustainable Columbus Initiatives/programs
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Engineering teams that review stormwater design
<i>How do your administrative/technical capabilities contribute to risk reduction in your community?</i>		
Utilizing DPU technical capabilities, improves critical infrastructure, management plans, watershed management, and hazard mitigation for emergency response planning.		

Fiscal Capability

The table below summarizes financial resources available to the City of Columbus.

Table 9.8-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Unknown
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Unknown
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Unknown
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Unknown
Incur debt through private activity bonds	Unknown
Withhold public expenditures in hazard-prone areas	Unknown
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Unknown
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Columbus.

Table 9.8-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	DPU Directors Office has three full time Public information Officers that manage public information for DPU Power, Water, and Sewers and Drains Divisions
Personnel skilled or trained in website development	Yes	DPU public relations/public information officers
Hazard mitigation information available on your website	Yes	Clearing Drains (Prevention of flooding)
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Franklin County tornado sirens, Everbridge -Alert Franklin County (mass notification)
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	DPU Website, Social Media, etc.

Community Classifications

The table below summarizes classifications for community programs available to the City of Columbus.

Table 9.8-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	-	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	-	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	-	-	-
Storm Ready Certification	-	-	-
Firewise Communities classification	-	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.8-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.8.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Columbus.

Table 9.8-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Columbus (C)	604	576	\$3,821,431.58	41	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Columbus.

Table 9.8-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No.

NFIP Topic	Comments
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No.
Are any RiskMAP projects currently underway in your jurisdiction?	Unknown.
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Look at the cost of the improvements in relation to the market value of the structure. If >50% then it is a SD/SI. We haven't had recent flood events in our jurisdiction. I have just done Substantial Improvements not Substantial Damage determinations.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	3 – unsure how they were funded.
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	The flood maps do not adequately address the flood risk in the City of Columbus as there is flooding which occurs from stormwater runoff which is not accounted for in the FEMA maps.
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Department of Public Utilities
Are any certified floodplain managers on staff in your jurisdiction?	Yes, Renee VanSickle, P.E., CFM.
Do you have access to resources to determine possible future flooding conditions from climate change?	No.
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes, the floodplain administrator needs to go to Floodplain training every year to stay up to date on relevant floodplain issues and understand any changes to conducting floodplain reviews. Additional staffing would be helpful.
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, research, helping residents with floodplain questions, inspections of illegal fill in the 100-year floodplain & engineering capability.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Look at the cost of the improvements in relation to the market value of the structure. If > 50% then it is a Substantial Improvement.
What are the barriers to running an effective NFIP program in the community, if any?	No barriers.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	No, but there is a scheduled visit to a house to see if it was built w/o an approved plan in the 100-year floodplain.
<ul style="list-style-type: none"> If so, state the violations. 	
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2013
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	1150.00 is the code which was last amended in 2010.
Does your floodplain management program meet or exceed minimum requirements?	Our program exceeds the minimum requirements. We require the lowest floor to be 1.5 feet above the BFE. Also, in the 2021 Columbus Stormwater Drainage Manual it requires
<ul style="list-style-type: none"> If exceeds, in what ways? 	

NFIP Topic	Comments
	equivalent compensatory storage for any fill in the 100-year floodplain.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No. The only thing slightly related to that is the Columbus Building Commission can hear floodplain variance requests & decide on them based on the Floodplain Code.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No.

9.8.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.8-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	0	-	0	27	0	2	0	23	0
Multi-Family	-	0	-	0	110	0	116	0	238	0
Other (commercial, mixed-use, etc.)	-	0	-	0	1009^	0	1445^	0	1433^	0
Total Permits Issued	-	0	-	0	1146	0	1563	0	1694	0

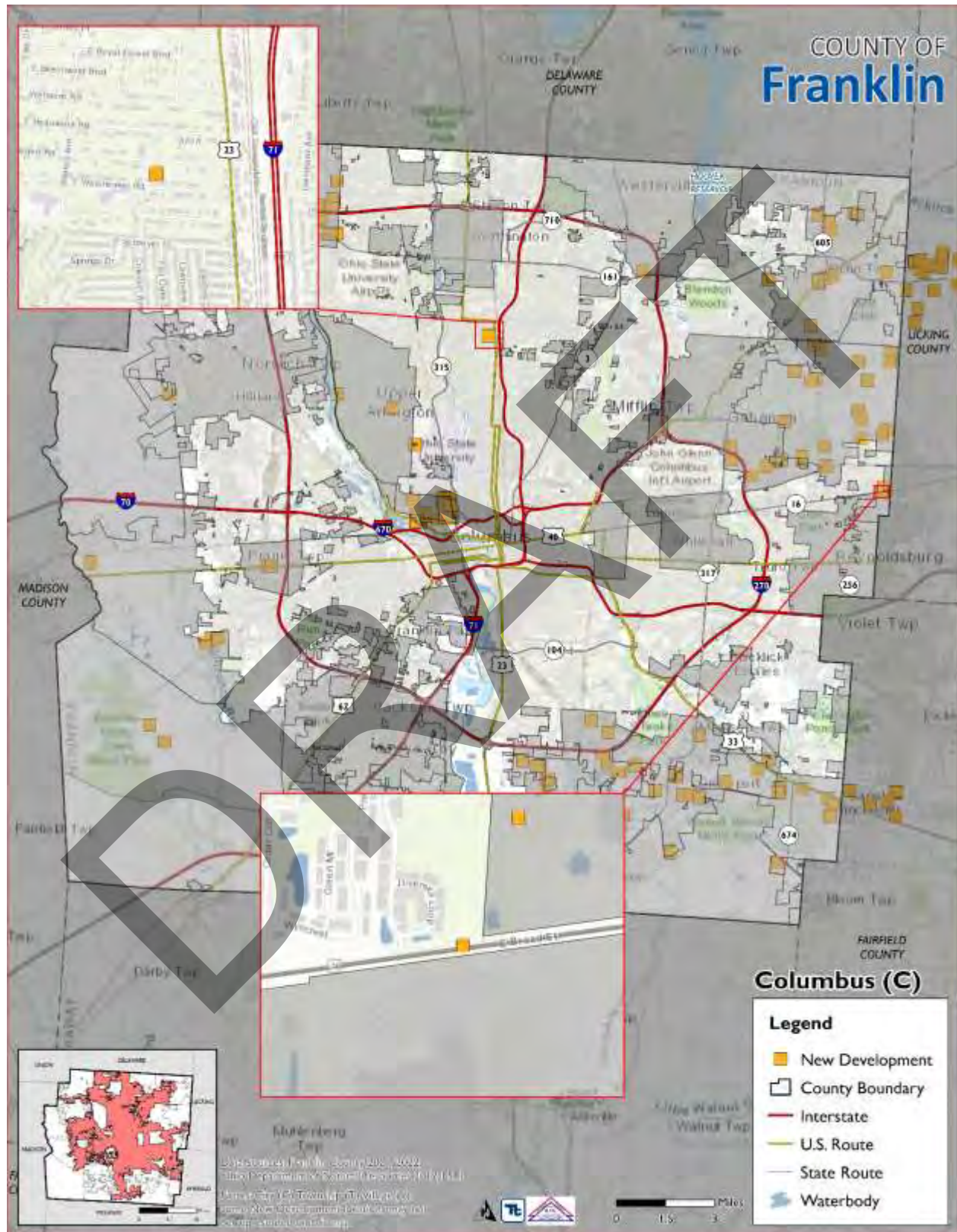
** These permits are not electronic, and the paper files are in extreme amounts.

^ Some of the same plans were reviewed multiple times before we could approve them by putting "No floodplain Comments".

Table 9.8-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
No Recent Major Development Occurred from 2018 to Present.					
Known or Anticipated Major Development in the Next Five (5) Years					
Intel	Commercial	Unknown	Unknown	Unknown	Electronic chip manufacturer. No major development in progress to report.

Figure 9.8-1. City of Columbus New Development



9.8.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Columbus's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Columbus has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.8-2. City of Columbus Hazard Area Extent and Location Map - Flood

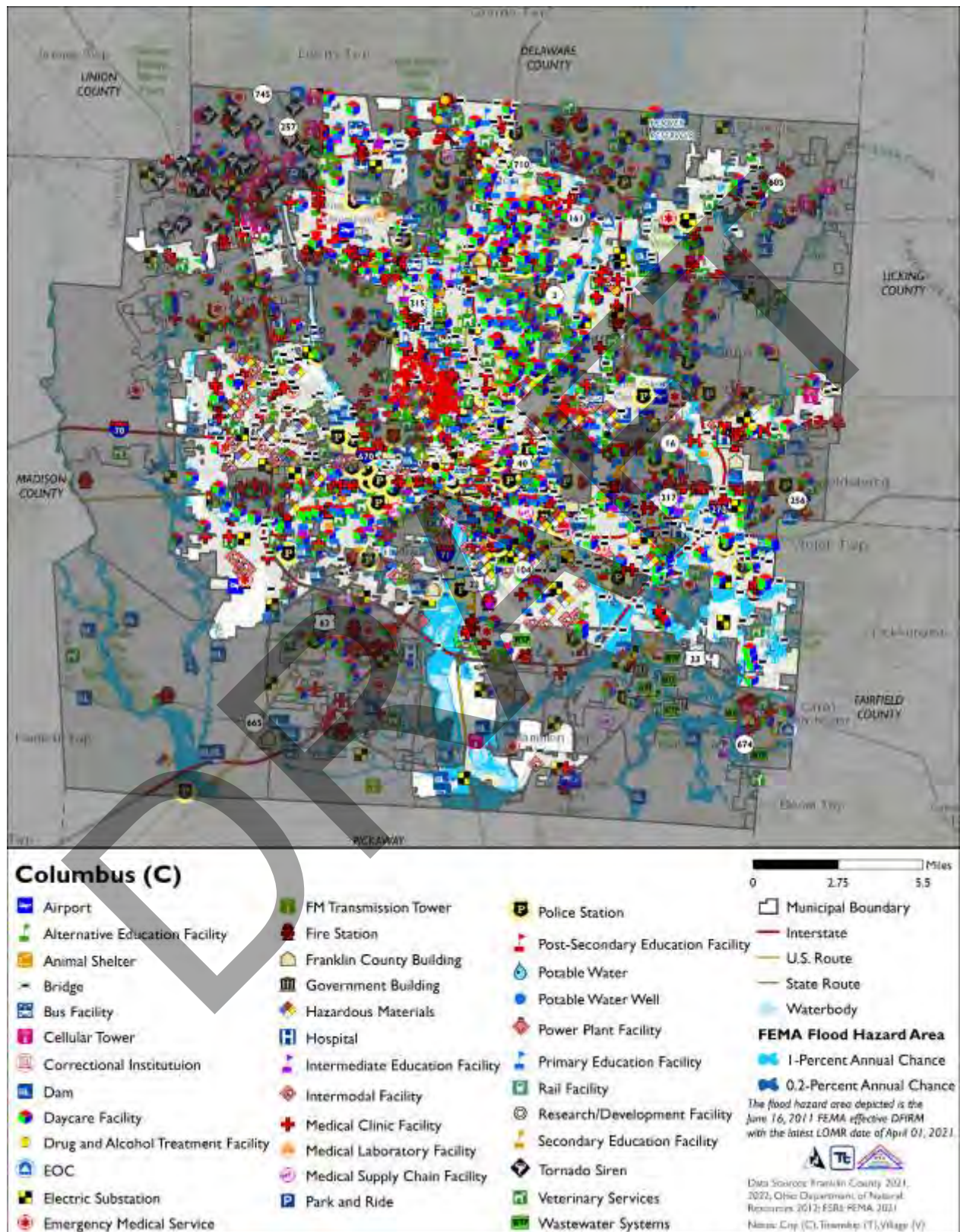


Figure 9.8-3. City of Columbus Hazard Area Extent and Location Map - Land Subsidence

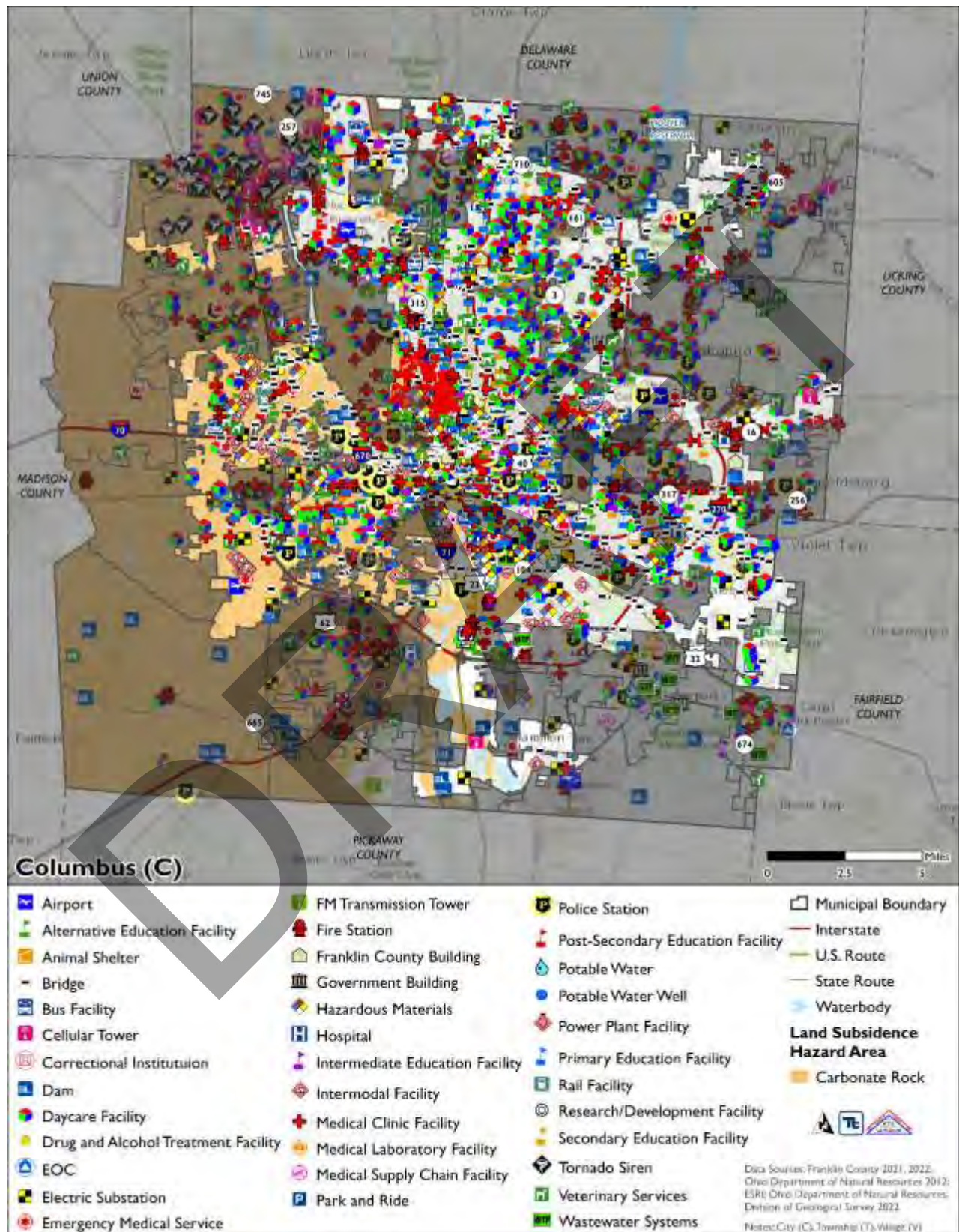


Figure 9.8-4. City of Columbus Hazard Area Extent and Location Map - Inland Erosion

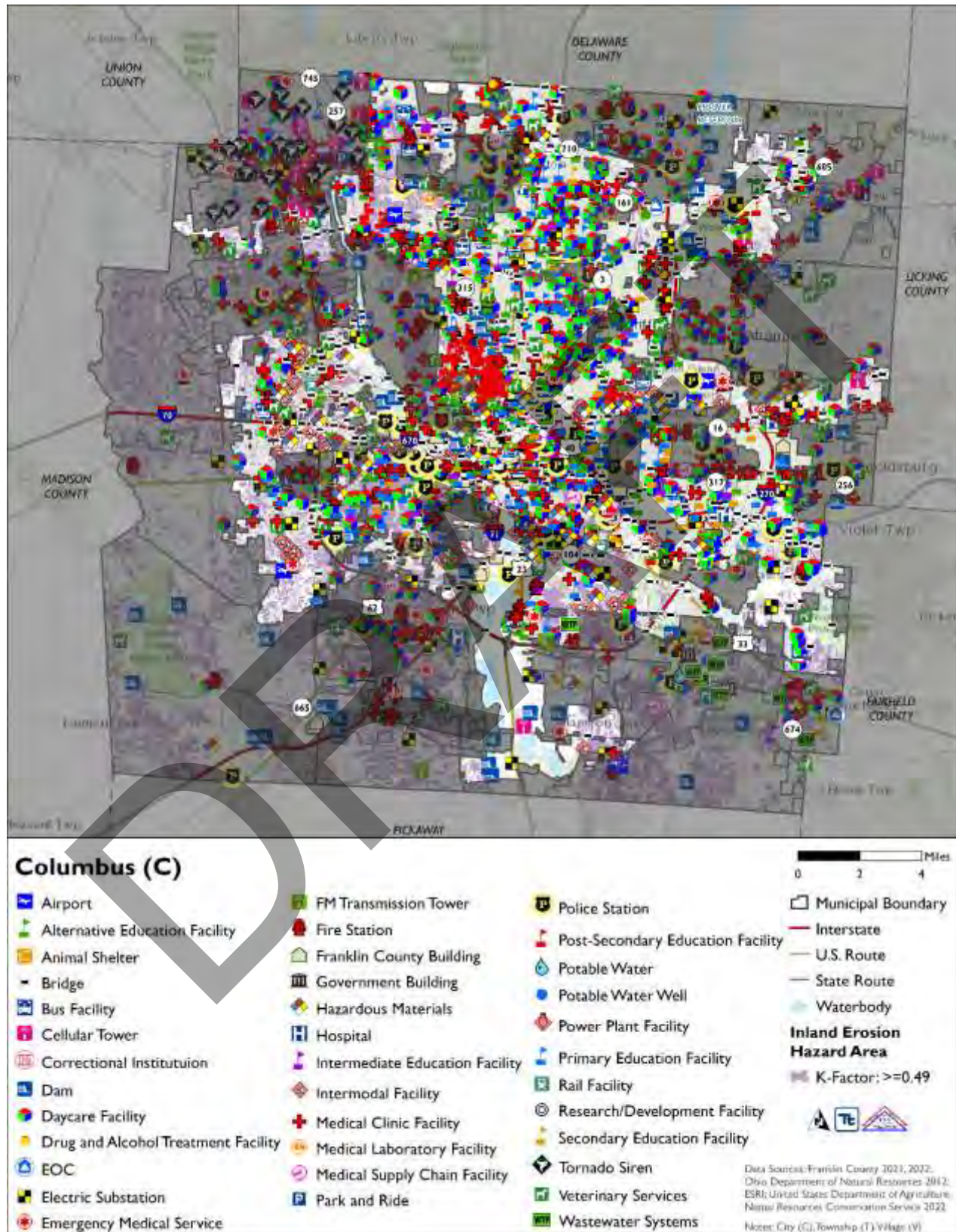
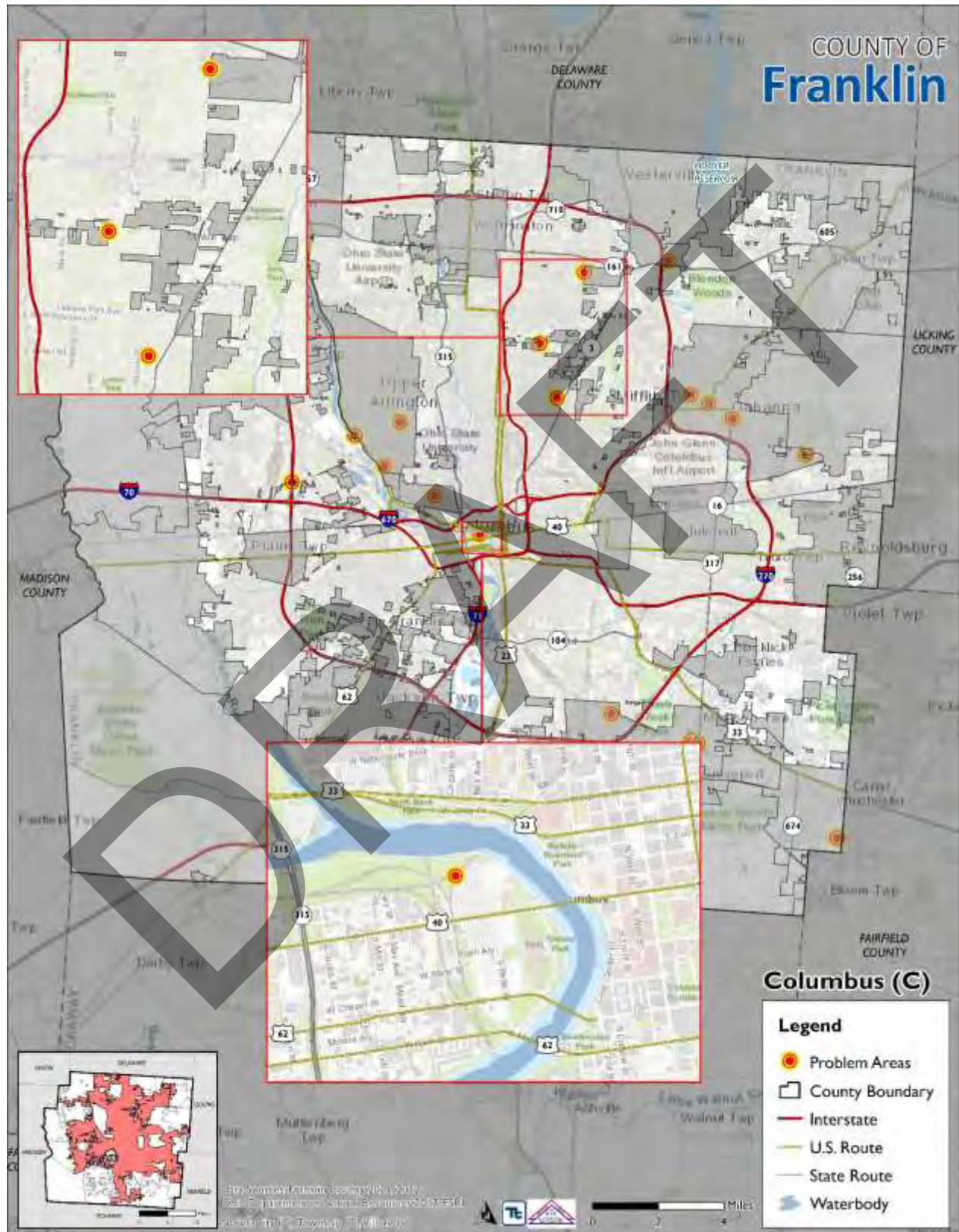


Figure 9.8-5. City of Columbus Hazard Area Extent and Location Map - Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Columbus' history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Columbus experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.8-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City did not experience any notable damages or losses.
March 2020-present	COVID-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	As of May 01, 2023, Columbus has had 197,567 confirmed cases and 2,002 reported deaths. There has been a total of 4,646 hospitalizations. Of those who have reported to have had COVID-19, 45% were Male and 55% were Female. The median age range is 32 years old. Healthcare workers account for roughly 3% of the total number of confirmed cases.
March 2020	Flooding	N/A	Record rainfall in Central Ohio causing significant flooding in March (2020). 2.89" was recorded, shattering the old daily record of 1.60" set in 1984. Several rivers and streams in central and southern Ohio recorded above flood stage for several days.	The City did not experience any notable damages or losses.
May 2020	Floodwall Event	N/A	On May 20, 2020, record-breaking rainfall around the city causing historic flooding in parts of Columbus/Franklin County. This caused the Scioto River to crest at more than 24 feet, necessitating implementation of two stoplog gates to provide our established line of	The City did not experience any notable damages or losses.

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			protection for the Franklinton and West Columbus areas.	
June 13, 2022	Heatwave	N/A	A significant heat dome brought blistering temperatures that have toppled records. Highs have spiked 10 to 20 degrees above average in spots, and some places have endured their hottest and most humid weather ever observed during June. This heat wave resulted in massive power outages.	The City did not experience any notable damages or losses.

Source: Columbus Public Health, 2023

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Columbus. The City of Columbus reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Columbus indicated the following:

- The City agreed with the ranking of the hazards.

Table 9.8-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.8-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Columbus

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	226	219
0.2-Percent Annual Chance Flood Event Hazard Area	325	310
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	438	375
Subsidence (Karst/Carbonate Rock) Hazard Area	1,067	978
Alum Creek Dam Inundation (MH Breach) Hazard Area	205	174
Delaware Dam Inundation (MH Breach) Hazard Area	598	577

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Columbus identified the following vulnerabilities within its community:

- Flooding occurs at all intersections between Morse Road and Cooke Road.
- Flooding occurs at all intersections between Olentangy River Road and Henderson Road.
- There have been deficiencies identified in the West Columbus Local Protection Project, including deteriorating sills, which are intended to provide flood protection.
- The Jackson Pike and Southerly Wastewater Treatment Plants need to have fill removed from previous plant work to be compliant with FEMA requirements.
- The Class II dams located at Greenlawn and College Avenues need embankment and structural repairs.

9.8.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.8-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Provide pre-identified locations for heating and cooling shelters, in events of extreme cold/extreme heat, generators and other expendable resources (blankets, water, etc.) for public consumption	Public Health	Completed	-	-	Columbus Recreation and Parks Department
Seek funding for repetitive loss structures to permanently reduce damage to these structures. (3 known properties est. at \$425,000 /2 years)	Mayor's Office	No Progress	-	-	-
Acquisition project in Sharon Woods (4,000,000 / 3 years)	Mayor's Office	-	-	-	-
Study cause of repeated flooding in Gould Park area and explore possible solutions to the flooding. (100,000 / 1year)	Mayor's Office	No Progress	-	-	-
Develop & implement an Emergency Action Plan to provide for flood protection of the North Bank Park / Arena District Area. (\$750,000)	Mayor's Office	No Progress	-	-	-
Buyout of flood prone properties in the Gould Park and Annadale / Martindale Areas. (\$3.0 Mil.)	Mayor's Office	-	-	-	-
Retrofit of city owned detention basins for water quality and peak flows. (\$1.0 Mil)	Public Utilities-DOSD	In Progress BRIC/HMGP/ Local Funds \$1,000,000	Yes	Flooding City owned detention basins needing retrofitting in the stormwater system to prevent flooding in peak flows.	Department of Public Utilities- Division of Sewerage and Drainage
Repair of Harmon Avenue Floodwall gate sill. (\$500,000)	DPU-DOSD	In Progress BRIC/HMGP/ Local Funds \$500,000	Yes	Flooding Repair and improve the sill of the Harmon floodwall gate to ensure	Department of Public Utilities- Division of Sewerage and Drainage

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
				proper function of the Franklinton Floodwall.	
Repair S.R. 315 floodwall. (\$300,000)	Public Utilities- DOSD	In Progress BRIC/HMGP/ Local Funds \$300,000	Yes	Flooding Repair and improve sections of the SR 315 floodwall to ensure proper function of the Franklinton Floodwall.	Department of Public Utilities- Division of Sewerage and Drainage
Stormwater five-year capital projects (\$15 Mil./yr.)	Public Utilities-DOSD	In Progress BRIC/HMGP/ Local Funds \$15,000,000	Yes	Flooding Capital Investment to improve stormwater collection system to prevent flooding in urban areas.	Department of Public Utilities- Division of Sewerage and Drainage
Repair of log gate across CSX Railroad. (\$500,000)	Public Utilities-DOSD	In Progress BRIC/HMGP/ Local Funds \$500,000	Yes	Flooding Repair and improve the Log Gate at CSX Railroad crossing to ensure proper function of the Franklinton Floodwall.	Department of Public Utilities- Division of Sewerage and Drainage

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Columbus identified the following mitigation efforts completed since the last HMP:

- Additional Community Centers are having HVAC systems upgraded to accommodate additional designated warming and cooling centers.

Since the adoption of the County's first HMP, the City of Columbus has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Columbus participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.8-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	X	X	X	-	-	X	X	X	X
Disease Outbreak	-	-	-	X	-	-	X	-	-	X
Drought	-	-	-	X	-	-	X	-	-	X
Earthquake	-	X	-	X	-	-	X	-	X	X
Extreme Temp	X	X	-	X	-	X	X	-	-	X
Flood	X	X	-	X	-	X	X	-	X	X
Geologic	-	X	-	X	-	-	X	-	X	X
Invasive Species	-	-	-	X	-	-	X	-	-	X
Severe Summer Weather	X	X	-	X	X	X	X	X	-	X
Severe Winter Weather	X	X	-	X	X	X	X	X	-	X
Tornado	X	X	-	X	-	X	X	-	X	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.8-18)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Columbus will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.8-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Columbus-01	Northeast Stormwater Study	Problem: Flooding along roadway between Morse Road and Cooke Road, which includes Clinton Estates (Shanley drive and Maize rd.) and all intersections in that neighborhood flood during heavy rain. Solution: Complete Northeast Stormwater Study to understand the extent of the flooding issue and review recommendations for flooding around Maize-Morse & Clinton Estates roadways to mitigate stormwater accumulation in that area.	Flood	2	2 years	Department of Public Utilities-Division of Sewerage and Drainage	Local Funds	High	Medium	Medium	SIP	SP
2023-Columbus-02	Northwest Stormwater Study	Problem: Flooding along roadway between Olentangy River Road and Henderson Road and intersections in that neighborhood flood during heavy rain. Solution: Complete Northwest Stormwater Study to understand the extent of the flooding issue and review recommendations for flooding around Henderson Road and Olentangy River road to mitigate stormwater accumulation in that area.	Flood	2	2 years	Department of Public Utilities-Division of Sewerage and Drainage	Local Funds	High	Medium	Medium	SIP	SP
2023-Columbus-03	Waste Treatment Plant Stormwater and Floodplain Improvements*	Problem: Jackson Pike and Southerly WWTP Stormwater and Flood plain needing improvements to comply with FEMA Requirements to remove fill from past plant work. Solution: Past work at the plants have placed fill in the floodplain that must be mitigated with compensatory cuts to comply with FEMA requirements. The project will create and require CLOMR and LOMR documents	Flood	2, 6	5 years	Department of Public Utilities-Division of Sewerage and Drainage	BRIC, HMGP, Local Funds	High	High	High	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		for floodplain and compensatory cuts. Stormwater Master Plan and BMP will account for all expected construction at the site for twenty years.										
2023-Columbus-04	Emergency Generators for Critical Facilities*	Problem: Pump station needs redundancy during loss of power to ensure continued operation of the Frank Road Pump Station, Greenlawn Ave Pump Station, and Dublin Rd. Pump Station. Solution: Identify and develop permanent standby generator system, which meet NEC Article 708 requirements for Critical Operations Power Systems at the City's Frank Road Pump Station, Greenlawn Ave Pump Station, and Dublin Rd. Pump Station.	Flood, Severe Summer Weather, Extreme Temperature, Tornado	6	2 years	Department of Public Utilities-Division of Sewerage and Drainage	BRIC, HMGP, Local Funds	High	High	High	SIP	SP
2023-Columbus-05	West Columbus Local Protection Project (WCLPP) Improvements*	Problem: There are deficiencies in existing West Columbus Local Protection Project (WCLPP). Visual inspections indicate that the existing sills of the stop log gates along the Franklinton Floodwall are deteriorating. This deterioration presents a safety concern due to the undermining and settlement of various elements within the sills, which create flow paths for flood waters below the stop log gates when installed. The existing sills are intended to provide flood protection for the Franklinton area as part of the WCLPP. This project will address flood protection concerns created by the deteriorating concrete and undermined/settling steel sections of the sills which support the stop log gates along McKinley Avenue, Souder Avenue, Rich Street, and Greenlawn Avenue as part of the WCLPP. Solution: This project will re-design and replace the existing sills to ensure that flood waters can be effectively retained by the stop log gates when installed. These improvements will 1) meet the current Army Corps of Engineers requirements; 2) eliminate the	Flood	6	3 years	Department of Public Utilities-Division of Sewerage and Drainage	BRIC, HMGP, Local Funds	High	High	High	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		current safety concerns presented by the deteriorating sills; 3.) address concerns/issues with the post-pocket designs, and 4) allow for reliable flood protection. In addition to the gate sill repairs, this project will address the concrete wall sections of the WCLPP which shall consist of visually inspecting both sides of the Floodwall (wet and dry), identifying and quantifying the areas where spalling and cracking have occurred, and developing standard details and specifications for the various types of concrete repairs that will be necessary.										
2023-Columbus-06	Pump Stations Evaluation & Upgrade*	Problem: Division of Sewers and Drains stormwater and sanitary pumping stations are needing to be evaluated and upgraded to ensure uninterrupted collection of stormwater. Solution: DOSD Stormwater and Sanitary Pump Stations have been constructed at various times and are used in various degrees. As such, a programmatic approach will be used to evaluate each pump station on a regular basis to ensure that it continues to operate as originally intended and is maintained regularly to ensure its integrity in order to continue the uninterrupted operation of collecting the City's stormwater and the City's sewage for transfer to the City's wastewater treatment facilities in preparation of a natural hazard, such as flooding.	Flood	6	1 year	Department of Public Utilities-Division of Sewerage and Drainage	Local Funds	High	High	High	SIP	SP
2023-Columbus-07	Green Lawn Ave Dam Project*	Problem: Greenlawn avenue Class II dam are needing embankment and structural repairs to prevent property damage to surrounding neighborhoods. Solution: Green Lawn Ave Dam Project will provide repairs to reinforce the dam embankment and provide upgrades to the existing dam structure to prevent property damage.	Dam and Levee Failure	6	2 years	Department of Public Utilities-Division of Sewerage and Drainage	Local Funds	High	High	High	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Columbus-08	College Ave Dam*	Problem: College avenue Class II dam are needing embankment and structural repairs to prevent property damage to surrounding neighborhoods. Solution: College Ave Dam project will upgrade existing infrastructure of the dam and provide structural reinforcement of its core physical components.	Dam and Levee Failure	6	2 years	Department of Public Utilities- Division of Sewerage and Drainage	Local Funds	High	High	High	SIP	SP
2023-Columbus-09	Canopy Preservation and Maintenance	Problem: Updating tree ordinances and Urban Forestry Master Plan to better balance canopy preservation with the impact to public safety aspects of management of trees trimming/ tree removal around critical infrastructure facilities, powerlines, and substations. Solution: Review infrastructure protection needs for tree mitigation and management of trees/tree limbs and update Urban Forestry Master Plan to ensure infrastructure protection needs are met.	Severe Summer Weather, Severe Winter Weather	1	3 years	Department of Public Utilities, Columbus Parks & Recreation		Medium	Medium	High	LPR	PR, NR
2023-Columbus-10	Sewer Line Relocation Feasibility Study	Problem: Sewer dams cross the Columbus waterways at several locations making them vulnerable to natural hazards (ice, debris, etc.), which if breached will release sewage into waterways and cause disruption to sanitary sewer systems. Solution: Study feasibility of relocating sewer lines that cross Columbus/Franklin County waterways to protect environment from failure of a sanitary system into the rivers/streams, while also providing protection of the sanitary sewer infrastructure.	Dam and Levee Failure	6	3 years	Department of Public Utilities- Division of Sewerage and Drainage	Local Funds	High	High	Medium	SIP, NSP	SP, NR
2023-Columbus-11	Critical Infrastructure Susceptibility Study	Problem: Review critical infrastructure facilities built in areas susceptible to erosion and land subsidence, such as Jackson Pike Waste Water Treatment Plant and its substation.	Geologic Hazards	6	2 years	Department of Public Utilities, Columbus Parks & Recreation	Local Funds, HMGP	Medium	Medium	Medium	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: Study and assess Columbus DPU critical infrastructure constructed on land susceptible to ground subsidence (K Factor (≥ 0.49) or rests on land that risks the to the critical facilities, substations, or other critical structure.										
2023-Columbus-12	All-Hazards Education Campaign	Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the City. Solution: Work with Franklin County EM&HS to provide residents of the City of Columbus with the necessary information to protect themselves and their property from the threats of all hazards.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS, Department of Public Safety, and Department of Neighborhoods	HMGP	High	Low	High	EAP	PI
2023-Columbus-13 (2018 Action #7)	Retrofit of city owned detention basins for water quality and peak flows*	Problem: Flooding during peak flows occurs at the City owned detention basins. Solution: Retrofit the City-owned detention basins to the appropriate size to mitigate future flooding.	Flood	6	4 to 5 years	Department of Public Utilities-Division of Sewerage and Drainage	BRIC/HMGP/Local Funds	High	High	High	SIP	SP
2023-Columbus-14 (2018 Action #8)	Repair of Harmon Avenue Floodwall gate sill*	Problem: The Harmon Avenue Floodwall gate sill has become damaged. Solution: Repair and improve the sill of the Harmon floodwall gate to ensure proper function of the Franklinton Floodwall.	Flood	6	4 to 5 years	Department of Public Utilities-Division of Sewerage and Drainage	BRIC/HMGP/Local Funds	High	High	High	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Columbus-15 (2018 Action #9)	Repair S.R. 315 floodwall*	Problem: Sections of the SR 315 floodwall for the Franklinton Wall has become damaged. Solution: Repair and improve sections of the SR 315 floodwall to ensure proper function of the Franklinton Floodwall.	Flood	6	4 to 5 years	Department of Public Utilities- Division of Sewerage and Drainage	BRIC/HMGP/ Local Funds	High	High	High	SIP	SP
2023-Columbus-16 (2018 Action #10)	Stormwater five-year capital projects.	Problem: Flooding is experienced in urban areas of the City, where riverine or inland flooding would not be experienced. Solution: Utilize capital Investments to improve stormwater collection system to prevent flooding in urban areas.	Flood	6	4 to 5 years	Department of Public Utilities- Division of Sewerage and Drainage	BRIC/HMGP/ Local Funds	High	High	High	SIP	SP
2023-Columbus-17 (2018 Action #11)	Repair of log gate across CSX Railroad.	Problem: The Log Gate at CSX Railroad for the Franklinton Wall has become damaged. Solution: Repair and improve the Log Gate at CSX Railroad crossing to ensure proper function of the Franklinton Floodwall.	Flood	6	4 to 5 years	Department of Public Utilities- Division of Sewerage and Drainage	BRIC/HMGP/ Local Funds	High	High	High	SIP	SP
2023-Columbus-18	Sustainable Columbus Resilience Hubs	Problem: In the event of a natural disaster where Columbus and Franklin County residents lose power, residents need a place to go to seek assistance (food/water/access to internet/medical services). Solution: Establish a coordinated network of resilience hubs by 1) developing an implementation plan for priority resilience hub locations by 2025, 2) implementing resilience hubs within a 15-minute walk of all residents by 2050.	Extreme Temperature, Flood, Severe Summer Weather, Tornado, Severe Winter Storm	6	2 to 3 years for the priority hubs; long-term for full implementation	Public Health, Sustainable Columbus	Local Funds, BRIC	High	High	High	SIP	ES
2023-Columbus-19	Regional Alert System*	Problem: Residents need to be able to receive time sensitive warnings in a manner that will be accessible to all. Solution: Implement a regional alert system for climate hazards by 2025.	Dam and Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme	6	2 to 3 years	Public Health, Department of Technology	Local Funds	High	High	High	EAP	ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Temperature, Flood, Geological Hazards, Invasive Species, Severe Summer Weather, Tornado, Severe Winter Storm									
2023-Columbus-20	Microgrid Prioritization Study	Problem: Residents need to have resilient power in the event of high winds, tornados, and extreme weather events. Solution: Complete a microgrid and energy storage prioritization study by 2025. Implement 5 microgrid pilot projects by 2030.	Extreme Temperature, Flood, Severe Summer Weather, Tornado, Severe Winter Storm	6	2 to 3 years for the prioritization study; long-term for full implementation	AEP Ohio, Sustainable Columbus	BRIC, Utility Funds, Other Federal IRA	High	High	High	SIP	PP
2023-Columbus-21	Resilient Building Design Checklist	Problem: Columbus and Franklin County buildings need to be designed to survive and thrive in extreme heat, floods, and adverse weather conditions. Solution: Develop and pilot a resilience design checklist in 2025.	Extreme Temperature, Flood, Severe Summer Weather, Tornado, Severe Winter Storm	6	2 to 3 years	Building and Zoning, Public Utilities	Local Funds	Medium	Low	High	LPR	PP

*Mitigation initiative is related to a critical facility and/or community lifeline
Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:
CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Mitigation Category:
• Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:
FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:
The time required for completion of the project upon implementation.
Cost:
The estimated cost for implementation.
Benefits:
A description of the estimated benefits, either quantitative and/or qualitative.



- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.8-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Columbus-01	Northeast Stormwater Study	0	1	1	1	0	1	1	0	0	1	0	1	0	0	7	Medium
2023-Columbus-02	Northwest Stormwater Study	0	1	1	1	0	1	1	0	0	1	0	1	0	0	7	Medium
2023-Columbus-03	Waste Treatment Plant Stormwater and Floodplain Improvements	1	1	1	1	1	1	1	1	0	1	0	1	1	1	12	High
2023-Columbus-04	Emergency Generators for Critical Facilities	1	1	1	1	0	1	1	0	0	1	1	1	1	1	11	High
2023-Columbus-05	West Columbus Local Protection Project (WCLPP) Improvements	1	1	1	1	1	1	1	0	0	1	0	1	1	1	11	High



Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Columbus-06	Pump Stations Evaluation & Upgrade	1	1	1	1	1	1	1	1	0	1	0	1	1	1	12	High
2023-Columbus-07	Green Lawn Ave Dam Project	1	1	1	1	1	1	1	1	0	1	0	1	1	1	12	High
2023-Columbus-08	College Ave Dam	1	1	1	1	1	1	1	1	0	1	0	1	1	1	12	High
2023-Columbus-09	Canopy Preservation and Maintenance	0	1	1	1	1	1	0	1	0	1	1	1	1	1	11	High
2023-Columbus-10	Sewer Line Relocation Feasibility Study	0	0	1	1	0	1	1	1	0	1	0	1	0	1	8	Medium
2023-Columbus-11	Critical Infrastructure Susceptibility Study	0	1	1	0	0	1	0	1	0	1	0	1	0	0	6	Medium
2023-Columbus-12	All-Hazards Education Campaign	1	1	1	1	1	1	1	1	0	1	1	1	0	0	11	High
2023-Columbus-13 (2018 Action #7)	Retrofit of city owned detention basins for water quality and peak flows.	1	1	1	1	1	1	0	0	0	1	0	1	1	0	9	High
2023-Columbus-14 (2018 Action #8)	Repair of Harmon Avenue Floodwall gate sill.	1	1	1	1	1	1	0	0	0	1	0	1	1	0	9	High
2023-Columbus-15 (2018 Action #9)	Repair S.R. 315 floodwall.	1	1	1	1	1	1	0	0	0	1	0	1	1	0	9	High
2023-Columbus-16 (2018 Action #10)	Stormwater five-year capital projects.	1	1	1	1	1	1	0	0	0	1	0	1	1	0	9	High
2023-Columbus-17 (2018 Action #11)	Repair of log gate across CSX Railroad.	1	1	1	1	1	1	0	0	0	1	0	1	1	0	9	High
2023-Columbus-18	Sustainable Columbus Resilience Hubs	0	0	1	1	1	1	1	1	0	0	1	0	1	1	9	High
2023-Columbus-19	Regional Alert System	1	0	1	1	1	1	1	1	1	0	1	0	1	1	11	High
2023-Columbus-20	Microgrid Prioritization Study	0	0	1	1	1	1	1	1	1	0	1	0	1	1	10	High
2023-Columbus-21	Resilient Building Design Checklist	0	1	1	1	1	1	1	1	0	1	1	1	1	1	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.9 CITY OF DUBLIN

This section presents the jurisdictional annex for the City of Dublin that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Dublin participated in the planning process, an assessment of the City of Dublin's risk and vulnerability, the different capabilities used in the City of Dublin, and an action plan that will be implemented to achieve a more resilient community.

9.9.1 Hazard Mitigation Planning Team

The City of Dublin identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Dublin departments/divisions. The Emergency Management Coordinator/Law Enforcement Planner represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. Several departments and divisions were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.9-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Tom Hirschy, Emergency Management Coordinator/Law Enforcement Planner	Name/Title:	Megan O'Callaghan, City Manager/(Emergency Management Director – per 36.04A)
Address:	6565 Commerce Parkway, Dublin, Ohio 43017	Address:	5555 Perimeter Drive, Dublin, Ohio 43017
Phone Number:	614-410-4808	Phone Number:	614-410-4420
Email:	thirschy@dublin.oh.us	Email:	mocallaghan@dublin.oh.us
NFIP Floodplain Administrator			
Name/Title:	Paul Hammersmith		
Address:	6555 Shier Rings Road, Dublin, Ohio 43017		
Phone Number:	614-410-4617		
Email:	phammersmith@dublin.oh.us		
Additional Contributors:			
Name/Title:	Robert Ranc, Deputy City Manager		
Method of Participation:	Capability Assessment Worksheet, Mitigation Action Review Worksheet, Annex Support Meetings for Mitigation Strategies, Future Mitigation Strategy Development		

Name/Title: Method of Participation:	Jenny Rauch, Director of Planning Capability Assessment Worksheet, Building Permits and New Development Worksheet, NFIP Floodplain Worksheet, New Development Input, Annex Support Meetings for Mitigation Strategies, Review Dublin HMP Annex
Name/Title: Method of Participation:	Bradley Fagrell, Director of Building Standards Capability Assessment Worksheet, Building Permits and New Development Worksheet, Annex Support Meetings for Mitigation Strategies, Review Dublin HMP Annex
Name/Title: Method of Participation:	Jay Anderson, Director of Public Service Capability Assessment Worksheet, Mitigation Action Review Worksheet, Annex Support Meetings for Mitigation Strategies, Future Mitigation Strategy Development, Review Dublin HMP Annex
Name/Title: Method of Participation:	Justin Paez, Chief of Police Risk Assessment and Mitigation Strategy Workshop, Annex Support Meetings for Mitigation Strategies
Name/Title: Method of Participation:	Matt Stiffler, Chief Financial Officer/Director of Finance Capabilities Assessment Worksheet
Name/Title: Method of Participation:	Matt Earman, Director of Parks and Recreation Capability Assessment Worksheet, Mitigation Action Review Worksheet
Name/Title: Method of Participation:	Jeannie Willis, Director of Transportation & Mobility Capability Assessment Worksheet, Review Dublin HMP Annex
Name/Title: Method of Participation:	Jennifer Klus, Director of Economic Development (resigned) Capabilities Assessment Worksheet
Name/Title: Method of Participation:	Michael Hendershot, Deputy Director of Engineering Building Permits and New Development Worksheet
Name/Title: Method of Participation:	Charles Stanford, Deputy Director of Engineering (resigned) Capability Assessment Worksheet
Name/Title: Method of Participation:	Mike Riebel, Battalion Chief with Washington Township Fire Department Capability Assessment Worksheet
Name/Title: Method of Participation:	Brandon Brown, Director of Innovation and Performance Analytics (Interim I.T. Director) Critical Facilities/Community Lifelines Input
Name/Title: Method of Participation:	Lindsay Weisenauer, Director of Communications & Public Information Mitigation Action Review Worksheet, Public Outreach Survey, Future Mitigation Strategy Development
Name/Title: Method of Participation:	Ron Whittington, Safety Administrator/Risk Manager with Human Resources Hazard Event History Worksheet
Name/Title: Method of Participation:	Michael Farrar, Director of Information Technology (resigned) Mitigation Action Review Worksheet
Name/Title: Method of Participation:	Bob Taylor, Director of Asset Management & Quality Assurance Problem Area Input, Review Dublin HMP Annex
Name/Title: Method of Participation:	Tracey Gee, Director of Recreation Services Future Mitigation Strategy Development
Name/Title: Method of Participation:	Kendel Blake, Management Analyst Review Dublin HMP Annex

9.9.2 Municipal Profile

The City of Dublin is in the northwest corner of Franklin County. The City of Dublin is located in Franklin, Delaware, and Union counties. Located 17 miles northwest of downtown Columbus, the City of Dublin is known for its parks, including scenic bike trails and developed parks with wooded natural areas and river frontage. The City of Dublin has a total area of 24.8 square miles, 24.44 square miles of land and 0.36 square miles of water.

According to the U.S. Census, the 2020 population for the City of Dublin was 49,359, an 18% percent increase from the 2010 Census. Data from the 2020 U.S. Census indicate that 5.6 percent of the population is 5 years of age or younger and 12.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.9.3 Jurisdictional Capability Assessment and Integration

The City of Dublin performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Dublin to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Dublin and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.9-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Chapter 150 – Building Regulations	Local	Building Standards
The City of Dublin enforces the latest State of Ohio adopted Building Codes. Statewide adoption of codes consistently enforced by trained personnel in conjunction with design professionals familiar with this basic design program tool, modern building regulations, substantially contribute to the decades long continuing decrease in fire deaths and property loss in Ohio, maintenance of affordable construction, as well as assure essential economic growth in the state.				
Zoning/Land Use Code	Yes	Chapter 153 – Zoning Regulations & Title XV – Land Use	Local	Planning and Engineering
The Zoning Code outlines permitted uses for each zoning district(s), as well as designated review process. As part of the review process, development applications are required to provide information about topography, water courses, wetlands, flood plain and flood hazard information (i.e., Code Section 153.054(C)(8)(a)). Applications are required to ensure adequate provisions are made for storm drainage within and throughout the site so as to maintain, as far as practicable, usual and normal swales, water courses and drainage areas (i.e. Code Section 153.055(A)(11)). Additionally, that adequate provision for storm drainage within and through the site complies with the applicable				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
code regulations and any design criteria established by the city or any other government entity (i.e., Code Sections 153.055(B)(8) and 153.066(F)(4)(I)). Development projects also require compliance with the City's Stormwater Management Design Manual.				
Subdivision Ordinance	Yes	Chapter 152 – Subdivision Regulations	Local	Planning
The City of Dublin restricts the subdivision of land within or adjacent to natural hazard areas. The subdivision ordinance requires compliance with Chapter 53 for storm drainage (Code Section 152.050).				
Site Plan Ordinance	Yes	Chapter 153 – Zoning Regulations and Chapter 152 – Subdivision Regulations	Local	Planning
The City of Dublin restricts site plans within or adjacent to natural hazard areas.				
Stormwater Management Ordinance	Yes	Chapter 53 – Stormwater Management and Stream Protection	Local	Engineering
Stormwater Management and Stream Protection, Chapter 53 regulates stormwater from areas of new development and redevelopment for the purpose of protecting the public health, safety, and welfare; defining appropriate stormwater control measures for the quantity and quality of stormwater runoff in the city; providing for waivers; providing requirements for the protection of water resources; imposing application fees and procedures; requiring adherence to the plans approved by the City Engineer; providing for maintenance; and providing for enforcement and penalties for violation.				
In order to protect, maintain, and enhance both the immediate and the long-term health, safety, and general welfare of the citizens of Dublin, it is the intent of the city to enact this chapter so as to accomplish the following objectives:				
(1) To prevent loss of life and loss of property due to flooding;				
(2) To protect, restore, and maintain the chemical, physical, and biological quality of ground and surface waters;				
(3) To encourage productive and enjoyable harmony between humanity and nature thus enhancing the scenic beauty and environment of the city;				
(4) To prevent individuals, business entities, and governmental entities from causing harm to the community by activities which adversely affect water resources;				
(5) To encourage the protection of natural systems, including groundwater and the use of those natural systems in ways which do not impair their beneficial functioning;				
(6) To assist in stabilizing the banks of streams to reduce bank erosion and the downstream transport of sediments eroded from watercourse banks;				
(7) To provide areas for natural meandering and lateral movement of stream channels;				
(8) To minimize the transport of sediments and pollutants to surface water and groundwater;				
(9) To provide high quality stream habitats with shade and food to a wide array of wildlife by maintaining diverse and connected riparian vegetation;				
(10) To provide economic benefits to the city by minimizing encroachment on stream channels and reducing the need for costly engineering solutions such as dams and riprap;				
(11) To protect structures and reduce property damage and threats to the safety of watershed residents;				
(12) To add to the quality of life of the residents of the city and corresponding property values;				
(13) To ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities, which may have an adverse impact upon groundwater and surface water.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	N/A	N/A	N/A
N/A				
Real Estate Disclosure	No	Nothing local, but the state has laws pertaining to this. Ohio Revised Code 4735.57 – Agency Disclosure Statement – Dual Agency Disclosure & 4735.58 – When Disclosure Statements To Be Provided & 5302.30 – Property Disclosure Form Required for All Residential Real Property Transfers	State	State Agency
Growth Management	Yes	City of Dublin Community Plan - https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/	Local	Planning And

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
		<p>City of Dublin Parks and Recreation Master Plan - https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> <p>The city is in the process of updating the community plan.</p> <p>The city is in the process of updating the Parks and Recreation Plan. https://dublinohiousa.gov/strategic-plans-documents/</p>		Parks Operations
<p>The Community Plan is the key policy guide for decision-making about Dublin's built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated 'islands' of land surrounded by the city.</p> <p>The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan's policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.</p> <p>Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City's fiscal health. Dublin's ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.</p> <p>https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ https://dublinohiousa.gov/strategic-plans-documents/</p> <p>-----</p> <p>Historically, the development and evolution of the Dublin park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf https://dublinohiousa.gov/strategic-plans-documents/</p>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Environmental Protection Ordinance	Yes	Chapter 151 – Flood Control and Chapter 53 – Stormwater Management and Stream Protection	Local	Engineering
<p>In addition to local code, there is state code – see below.</p> <p>Ohio Revised Code 3745 – Environmental Protection Agency (State)</p> <p>It is the intent of the general assembly that the environmental protection agency shall:</p> <ul style="list-style-type: none"> (A) Promulgate and put into execution a long-term comprehensive plan and program to conserve, protect, and enhance the air, water, and other natural resources of the state; (B) Prevent and abate pollution of the environment for the protection and preservation of the health, safety, welfare, and property of the people of the state; (C) Administer the air, water, and other natural resources of the state for the use and benefit of the people of the state; (D) Promote the development of technology for environmental protection and management; (E) Operate the state government in ways designed to minimize environmental damage, and assist and cooperate with governmental agencies to restore, protect, and enhance the quality of the environment; (F) Provide for enforcement of the right of the people to environmental quality consistent with human health and welfare. <p>The director of environmental protection may designate one of his staff to serve directly under the director as an ombudsman and expeditor between the citizens and the environmental protection agency in all matters of the environment.</p>				
Flood Damage Prevention Ordinance	Yes	Chapter 151 – Flood Control and Chapter / 153.111 – Flood Plain Regulations / 151.09 – Methods of Reducing Flood Losses	Local	Engineering
<p>CHAPTER 151: FLOOD CONTROL</p> <p>It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> (A) Protect human life and health; (B) Minimize expenditure of public money for costly flood control projects; (C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (D) Minimize prolonged business interruptions; (E) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazards; (F) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas; (G) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. <p>151.09 METHODS OF REDUCING FLOOD LOSSES.</p> <p>In order to accomplish its purposes, this chapter includes methods and provisions for:</p> <ul style="list-style-type: none"> (A) Restricting or prohibiting uses which are dangerous to health, safety and property due to water hazards, or which result in damaging increases in flood heights or velocities; (B) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (C) Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel flood waters; (D) Controlling filling, grading, dredging and other development which may increase flood damage; and (E) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. 				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
The link below outlines the purpose of the section and requirements to be met. https://codelibrary.amlegal.com/codes/dublin/latest/dublin_oh/0-0-0-93839#JD_Chapter151				
Wellhead Protection	No	N/A	N/A	N/A
There is state code - Ohio Revised Code 3750.11(G) that states that a political subdivision that owns, operates, or is served by a public water system as defined in section 6109.01 of the Revised Code may establish and enforce requirements that provide for the protection of ground water resources that serve as a source of drinking water for its public water system and that are located within scientifically derived wellhead protection areas.				
Emergency Management Ordinance	Yes	Chapter 36 – Emergency Management	Local	City Manager
It is the intent and purpose of this chapter to assign responsibility to ensure the complete and efficient utilization of all of the city's resources to cope with a disaster, whether it be man-made, technological, or natural.				
Climate Change Ordinance	No	N/A	N/A	N/A
As part of the future parks and recreation master plan, there is a 2-page section titled, "Climate Change Assessment".				
Planning Documents				
Comprehensive/Master Plan	Yes	<p>City of Dublin 2013 Community Plan – https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/</p> <p>and</p> <p>City of Dublin Parks and Recreation Master Plan - https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> <p>The city is in the process of updating the community plan.</p> <p>The city is in the process of updating the Parks and Recreation Plan.</p> <p>https://dublinohiousa.gov/strategic-plans-documents/</p>	Local	Planning, Engineering, and Parks and Recreation
<p>The Community Plan is the key policy guide for decision-making about Dublin's built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated 'islands' of land surrounded by the city.</p> <p>The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan's policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.</p> <p>Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City's fiscal health. Dublin's ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.</p> <p>https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ https://dublinohiousa.gov/strategic-plans-documents/</p>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p>The Community Plan highlights the importance of natural features and makes recommendations to protect these areas. The Future Land Use Plan identifies the types of development and uses, and the appropriate locations. Where there are natural features to preserve the Special Area Plans also make recommendations to minimize impacts. See attached Community Character and Environment chapter for additional information.</p> <p>Historically, the development and evolution of the Dublin Park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p>				
Capital Improvement Plan	Yes	Chapter 8.03 – Capital Program	Local	Finance and City Manager
<p>The City of Dublin maintains a five-year capital improvements program/plan (CIP) that is updated annually. Projects may be included in this CIP for risk reduction.</p> <p>Dublin City Council has adopted the 2023-2027 Five-Year Capital Improvements Program (CIP), which allocates \$225 million dollars for new and existing infrastructure in the city. It was developed to advance the City's Strategic Framework supporting the Sustainability of our City's finances and environment as well as funding projects that will Connect our residents through infrastructure and mobility projects. Finally, it was also designed to build a resilient community focusing on safety and resident's needs with regard to mental and physical health.</p> <p>"The 2023-2027 CIP provides funding to advance our Strategic Framework on a number of fronts including sufficient funding for the maintenance of current assets, funding for parks and recreation opportunities, and new projects to enhance the City's infrastructure and improve mobility while staying within the fiscal resources available to us" said Matthew Stiffler, Chief Financial Officer/Director of Finance.</p> <p>The CIP is a five-year outlook for anticipated capital projects and is reviewed and updated annually by the City. These projects are primarily related to improvements in transportation, parks, utilities and facilities. The CIP represents a long-term financial plan, which establishes priorities, identifies project costs and phasing, identifies funding sources, and serves as a planning document for capital improvements. The projects and their timing are reviewed annually by City Council, and adopted by Ordinance. As a planning document, the CIP is a fluid document being revisited many times during the course of the year by City Council, and the City's Administration. Annual revisions to the CIP are based on many considerations, including adjustments in funding sources, construction timing, and the changing needs and priorities of the City.</p> <p>In developing the Five-Year CIP, several elements are taken into consideration:</p> <ul style="list-style-type: none"> • City Council goals • Community surveys • Economic development opportunities • Current economic climate • Grant funding opportunities • Commitments made by the City of Dublin • Maintenance and rehabilitation of existing City facilities and infrastructure • Technology improvements • Enhancements within the community <p>https://dublinohiousa.gov/capital-improvements-program/</p>				
Disaster Debris Management Plan	No	N/A	N/A	N/A



N/A				
Floodplain Management or Watershed Plan	Yes	Chapter 151 – Flood Control and Chapter / 153.111 – Flood Plain Regulations / 151.09 – Methods of Reducing Flood Losses	Local	Engineering
<p>CHAPTER 151: FLOOD CONTROL</p> <p>It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> (A) Protect human life and health; (B) Minimize expenditure of public money for costly flood control projects; (C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (D) Minimize prolonged business interruptions; (E) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazards; (F) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas; (G) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. 				
Stormwater Management Plan	Yes	Chapter 53 – Stormwater Management and Stream Protection / Chapter 53.110 Stormwater Management Plan	Local	Engineering
<p>CHAPTER 53: STORMWATER MANAGEMENT AND STREAM PROTECTION</p> <p>Regulates stormwater from areas of new development and redevelopment for the purpose of protecting the public health, safety, and welfare; defining appropriate stormwater control measures for the quantity and quality of stormwater runoff in the city; providing for waivers; providing requirements for the protection of water resources; imposing application fees and procedures; requiring adherence to the plans approved by the City Engineer; providing for maintenance; and providing for enforcement and penalties for violation.</p> <p>In order to protect, maintain, and enhance both the immediate and the long-term health, safety, and general welfare of the citizens of Dublin, it is the intent of the city to enact this chapter so as to accomplish the following objectives:</p> <ul style="list-style-type: none"> (1) To prevent loss of life and loss of property due to flooding; (2) To protect, restore, and maintain the chemical, physical, and biological quality of ground and surface waters; (3) To encourage productive and enjoyable harmony between humanity and nature thus enhancing the scenic beauty and environment of the city; (4) To prevent individuals, business entities, and governmental entities from causing harm to the community by activities which adversely affect water resources; (5) To encourage the protection of natural systems, including groundwater and the use of those natural systems in ways which do not impair their beneficial functioning; (6) To assist in stabilizing the banks of streams to reduce bank erosion and the downstream transport of sediments eroded from watercourse banks; (7) To provide areas for natural meandering and lateral movement of stream channels; (8) To minimize the transport of sediments and pollutants to surface water and groundwater; (9) To provide high quality stream habitats with shade and food to a wide array of wildlife by maintaining diverse and connected riparian vegetation; (10) To provide economic benefits to the city by minimizing encroachment on stream channels and reducing the need for costly engineering solutions such as dams and riprap; (11) To protect structures and reduce property damage and threats to the safety of watershed residents; (12) To add to the quality of life of the residents of the city and corresponding property values; (13) To ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities, which may have an adverse impact upon groundwater and surface water. <p>The ordinance serves as the city's stormwater management plan. There are future plans to possibly promote a city engineer position that would focus on stormwater management.</p>				
Open Space Plan	Yes	City of Dublin 2013 Community Plan – https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ and City of Dublin Parks and Recreation Master Plan -	Local	Planning and Parks Operations

		https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf The City of Dublin is in the process of updating the community plan and the parks and recreation master plan. https://dublinohiousa.gov/strategic-plans-documents/		
<p>The Community Plan is the key policy guide for decision-making about Dublin's built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated 'islands' of land surrounded by the city.</p> <p>The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan's policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.</p> <p>Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City's fiscal health. Dublin's ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.</p> <p>https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ https://dublinohiousa.gov/strategic-plans-documents/ -----</p> <p>Historically, the development and evolution of the Dublin park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p>				
Urban Water Management Plan	No	N/A	N/A	N/A
The City of Dublin receives water from the City of Columbus.				
Habitat Conservation Plan	Yes	Chapter 53.200 – Establishment of a Stream Corridor Protection Zone	Local	Engineering
In addition to this city code, see the Community Plan and the Parks and Recreation Master Plan.				
Economic Development Strategic Plan	Yes	Published in October 2019 The City of Dublin is in the process of updating the Economic Development Strategic Plan.	Local	Economic Development
<p>Selected Portions from the Economic Development Strategic Plan:</p> <p>... each of the attributes that have driven Dublin's past success also expose the city to risks that can jeopardize the future growth trajectory in the face of new disruptive socioeconomic headwinds.</p>				

... Dublin's reliance on leading anchor companies to ground the employment footprint of the industrial base presents the risk of outsized negative economic impacts from any business dynamics that affect those companies or their site locations in the absence of efforts to diversify the industry and company mix.

... Multiple disruptive trends affecting economic development, demographics, and the changing nature of work are driving the economic risks that Dublin faces as a city.

... proactively preparing for a future of work that is more decentralized, virtual, and less dependent on large bases of single employer labor can help mitigate significant risk of negative economic consequences if key companies experience disruptive effects to their business models or consider new site location models in the face of technological changes.

... Mitigating these risks will require ongoing investment and a clear economic development strategy in order to maintain the city's current identity as a destination community.

Internal Link: N:\Economic Development\Economic Development Programs\Awards\IEDC Awards\2021\IEDC Excellence Awards_Category 25_EDO of the Year_City of Dublin\Supplemental Material_EDO of the Year\9. Strategic Plan\City of Dublin Economic Development Strategy.pdf

Shoreline Management Plan	No	N/A	N/A	N/A
N/A				

Community Wildfire Protection Plan	No	N/A	N/A	N/A
N/A				

Community Forest Management Plan	Yes	N/A	Local	Public Service
The Community Forest Management Plan includes a Woodlot Management Program w/Priority Ranking for each Woodlot to remove invasive species, and remove downed dead wood within 50 yards of the paths.				

Transportation Plan	Yes	Title VII, Chapter 70.20	Local	Transportation & Mobility
----------------------------	-----	--------------------------	-------	---------------------------

All traffic-control devices placed pursuant to the provisions of this Traffic Code shall conform to the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, as set forth in ORC 4511.09.

All traffic signals have battery back-up power systems.

Dublin has conducted a number of transportation studies throughout the community.

Agriculture Plan	No	N/A	N/A	N/A
N/A				

Climate Action/ Resiliency/Sustainability Plan	No	N/A	N/A	N/A
---	----	-----	-----	-----

The Community Plan is the key policy guide for decision-making about Dublin's built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated 'islands' of land surrounded by the city.

The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan's policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.

Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City's fiscal health. Dublin's ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.

<https://communityplan.dublinohiousa.gov/home/2007-community-plan/>

<https://communityplan.dublinohiousa.gov/>

<https://www.envisiondublin.org/>

<p>Historically, the development and evolution of the Dublin park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> <p>As part of the future parks and recreation master plan, there is a 2-page section titled, "Climate Change Assessment".</p>				
Tourism Plan	Yes	https://www.visitdublinohio.com/	N/A	Dublin Convention and Visitors Bureau (DCVB)
https://www.visitdublinohio.com/ - Visit Dublin Ohio is a non-government organization				
Business/ Downtown Development Plan	Yes	<p>The Business development plan is contained within the Economic Development Strategic Plan.</p> <p>The City of Dublin is in the process of updating the Economic Development Strategic Plan.</p>	Local	Economic Development
<p>See Economic Development Plan. The Business development plan is contained within the Economic Development Strategic Plan.</p> <p>Internal Link: N:\Economic Development\Economic Development Programs\Awards\IEDC Awards\2021\IEDC Excellence Awards_Category 25_EDO of the Year_City of Dublin\Supplemental Material_EDO of the Year\9. Strategic Plan\City of Dublin Economic Development Strategy.pdf</p>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Chapter 36.06 Local Emergency Operations Plan	Local	City Manager
<p>It is the intent of this Plan that the services, equipment, facilities, and personnel of all existing departments and divisions shall be utilized to the fullest extent possible to respond to an emergency incident within the city. The Local Emergency Operations Plan shall include a hazard analysis, which is analysis of potential hazards to determine the probable impact each of those hazards could have on people and property and includes actions taken to eliminate or reduce the degree of long-term risk to human life and property from natural, man-made and technological hazards; actions taken in advance of a disaster to develop operational capabilities and facilitate an effective response in the event a disaster occurs; actions taken immediately before, during or directly after a disaster occurs, to save lives, minimize damage to property, and enhance the effectiveness of recovery; and activity to return vital life support systems or minimum operating standards and long-term activity designed to return life to normal or improved levels. The City of Dublin maintains a comprehensive emergency operations plan (EOP).</p>				
Continuity of Operations Plan	Yes	N/A	Local	City Manager
<p>Section XIX in the City of Dublin Emergency Operations Plan (EOP) addresses continuity of operations and continuity of government.</p> <p>The City of Dublin also has a Business Recovery Plan. This plan identifies requirements for all city departments and staff to effectively perform and deliver essential services, and how to do so, if a critical incident disrupts normal operations. The plan allows for the city to be resilient and have the capacity to withstand and recover from an adverse occurrence. This resilience allows the city to build the essential strength, stability, and capacity needed to retain certain capabilities throughout the course of a major disaster – and to recuperate as quickly and as efficiently as possible during the post-disaster recovery phase. The City of Dublin has established resilience through a number of different divisions, departments, and citywide strategies and programs.</p>				
Strategic Recovery Planning Report	Yes	N/A	Local	I.T.
<p>The city has a Business Recovery Plan and I.T. Disaster Recovery Plan that delineates policies and procedures for technological disaster recovery, as well as process-level plans for recovering critical system infrastructure and applications. The purpose of this plan is to provide documented tasks and resources that will recover the City's technology with the recovery time objectives as established by the City.</p>				

This plan protects city information, the city employees and the city itself in the event of an emergency. This plan is documented for the Information Technology Team. The goals and objectives of this printed plan is to recover the City's technology at the recovery location. The purpose of this Plan is to provide documented tasks and resources that will recover the City's technology within the recovery time objectives as established by the business departments.				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	The City of Dublin contracts with FCEMHS, Dublin is part of the county-wide THIRA; In addition, the City of Dublin also completes a supplemental hazard analysis (Chapter 36.06C)	FCEMHS & Local	FCEMHS
As the city contracts with FCEMHS, Dublin is part of the countywide THIRA; In addition, the city also completes a supplemental hazard analysis (Chapter 36.06C) as part of the city's local emergency operations plan.				
Post-Disaster Recovery Plan	No	N/A	N/A	N/A
N/A				
Public Health Plan	No	Dublin contracts public health services through Franklin County Public Health (FCPH).	FCPH	FCPH
Dublin contracts public health services through Franklin County Public Health (FCPH).				
Other	N/A	N/A	N/A	N/A
N/A				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Dublin to oversee and track development.

Table 9.9-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Building Standards and Planning
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Special flood hazard area permits may be issued as needed or as required.
Do you have a buildable land inventory? • If yes, please describe	Yes	<p>https://communityplan.dublinohiousa.gov/future-land-use-map/</p> <p>The Future Land Use Map classifies all parcels within the Dublin planning area with a recommended land use, each shown with a different color. The map is supported by a detailed description of Land Use Classifications, which explain the general character of each land use type, including typical ranges for residential and non-residential densities.</p> <p>In some cases, the recommended future land use is the same as the existing land use. However, in certain locations throughout the planning area, the Future Land Use Map and special area plans contain parcels with existing uses that are proposed for a change in land use, or for redevelopment as part of a larger site. In either case, it is not the intent of this Plan to place existing uses in a situation where their value or the quality of life of residents is adversely affected. Rather, the intent is to demonstrate to potential purchasers or developers the City's long-range view of how particular properties should be reconfigured and used should it become feasible to do so.</p>

Indicate if your jurisdiction implements the following	Yes/No	Comment:
		<p>Accordingly, where existing uses are thriving, redevelopment proposals will generally only be considered under a narrow range of conditions. Specifically, new development plans will only be considered for properties that are either already adjacent to or part of another new development, or, when a development proposal includes all of the existing, affected properties.</p> <p>Existing uses should not be isolated or surrounded by development that would significantly alter their usefulness. Similarly, larger developments should not be planned that leave behind small, isolated pockets of incompatible uses. To do so would severely limit the redevelopment potential for these sites and possibly interrupt traffic flow, natural feature protection, pedestrian movement, or other operation of the adjacent project. For more information regarding the Land Use Plan, maps, policies and intent, please contact Land Use and Long Range Planning.</p>
Describe the level of build-out in your jurisdiction.	N/A	<p>See Community Plan https://communityplan.dublinohiousa.gov/ https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://www.envisiondublin.org/</p> <p>See Community Plan – Future Land Use</p> <p>The city is in the process of updating the community plan. https://dublinohiousa.gov/strategic-plans-documents/</p>

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Dublin and their current responsibilities that contribute to hazard mitigation.

Table 9.9-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	<p>Planning & Zoning Commission https://dublinohiousa.gov/boards-commissions/planning-zoning-commission/</p> <p>The principal responsibility of the PZC is to review certain applications for land development approvals as determined by the City of Dublin Zoning Code and Subdivision Regulations. For most applications, the Commission is a recommending body for City Council.</p> <p>The Planning and Zoning Commission (PZC) consists of seven members who are residents of the City of Dublin and appointed by City Council.</p> <p>Plans/projects are reviewed by Engineering to ensure floodplain and stormwater management requirements are met. Planning and Zoning Commission makes determination based on review criteria to ensure compliance.</p>
Zoning Board of Adjustment	Yes	Board of Zoning Appeals

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		https://dublinohiousa.gov/boards-commissions/board-of-zoning-appeals/ The city is made up of thousands of individual properties, all of which are subject to the requirements of the Dublin Zoning Code. In some situations, a property's physical character will make it impractical to meet those requirements. It is the job of the Board of Zoning Appeals (BZA) to ensure that the Zoning Code is fairly applied to all properties and to grant modifications, or "variances" to the Code when warranted by these conditions. The BZA consists of five members who are Dublin residents and appointed by City Council. In addition to reviewing variance requests, the Board reviews and takes action on administrative appeals on any zoning or building decisions issued by the City. The Board also reviews special permits, which typically are a request for the operation of a model home or sales trailer, but could also include the operation of heliports, dish antennas, portable classrooms or construction trailers.
Planning Department	Yes	https://dublinohiousa.gov/ova_dep/community-development/ 20 staff assigned to the Division of Planning. Planning and Engineering work together to ensure projects meet the floodplain and stormwater management requirements. Code Enforcement (1 supervisor and 3 code enforcement officers) works with staff to ensure all City Codes are met.
Mitigation Planning Committee	No	N/A
Environmental Board/Commission	Yes	Community Services Advisory Commission https://dublinohiousa.gov/boards-commissions/community-services-advisory-commission/ A Community Services Advisory Commission of the City of Dublin is hereby formed to address and to make recommendations to Council on community services, parks and recreation services, natural resources, and related issues at the request of Council.
Open Space Board/Committee	Yes	Community Services Advisory Commission https://dublinohiousa.gov/boards-commissions/community-services-advisory-commission/ A Community Services Advisory Commission of the City of Dublin is hereby formed to address and to make recommendations to Council on community services, parks and recreation services, natural resources and related issues at the request of Council. Planning & Zoning Commission https://dublinohiousa.gov/boards-commissions/planning-zoning-commission/ The principal responsibility of the PZC is to review certain applications for land development approvals as determined by the City of Dublin Zoning Code and Subdivision Regulations. For most applications, the Commission is a recommending body for City Council. The Planning and Zoning Commission (PZC) consists of seven members who are residents of the City of Dublin and appointed by City Council.

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Economic Development Commission/Committee	No	N/A
Public Works/Highway Department	Yes	62 road ready staff
Construction/Building/Code Enforcement Department	Yes	<ul style="list-style-type: none"> • Director, Building Standards 1 • Commercial Plans Examiner 1 • Senior Building Inspector 1 • Building Inspector 4 • Electrical Inspector 1 FT & 1 PT • Residential Plans Examiner 1 • Development Review Specialist 1 • Review Services Coordinator 1 Permit Technician 2
Emergency Management/Public Safety Department	No	The City of Dublin contracts with Franklin County Emergency Management & Homeland Security (FCEMHS) agency.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	<p>Dublin maintains 29 outdoor warning sirens (Dublin Emergency Warning System – DEWS / tornado sirens).</p> <p>Dublin maintains lightning prediction systems in its major parks that alerts parks users to nearby lightning.</p> <p>Four Electrical Workers and one crew leader responsible for the routine maintenance and operations of the emergency warning siren system.</p> <p>To enhance citizen awareness during emergencies, Dublin residents are encouraged to sign up for the ALERT Franklin County mass notification and warning system and Dublin's Smart911 community notification system.</p> <ul style="list-style-type: none"> • https://dublinohiousa.gov/dev/emergency-preparedness/dublin-emergency-calling-system/
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stormwater maintenance program is part of the Capital Improvements Plan (CIP Budget) and tree trimming is part of the city's operations budget.
Mutual aid agreements	Yes	Police and Public Works mutual aid agreements; Ohio Revised Code IMAC & EMAC
Human Resources Manual	Yes	1 safety administrator / risk manager
Other	N/A	N/A
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	<p>2 engineers and 1 planner in Transportation & Mobility staff; 2 engineers in Division of Engineering</p> <p>All planners and engineering staff working in the development department understand the need to ensure compliance with requirements.</p>
Engineers or professionals trained in building or infrastructure construction practices	Yes	6 engineers in Division of Engineering
Planners or engineers with an understanding of natural hazards	Yes	<p>8 engineers in Division of Engineering</p> <p>All planners and engineering staff working in the development department understand the need to ensure compliance with requirements.</p>
Staff with expertise or training in benefit/cost analysis	No	N/A
Professionals trained in conducting damage assessments	Yes	Division of Building Standards
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	4	1 Director, 1 Manager, and 2 Analysts; Dublin does not use HAZUS

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Environmental scientist familiar with natural hazards	No	N/A
Surveyor(s)	Yes	1 in the Division of Engineering
Emergency Manager	Yes	By code (36.04A&B), the City of Dublin's City Manager serves as the City's Emergency Management Director.
Grant writer(s)	No	Dublin does not have full-time grant writers, but Dublin does have employees capable of completing grant applications.
Resilience Officer	No	N/A
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	In the future, an engineer will be devoted to stormwater.

Fiscal Capability

The table below summarizes financial resources available to the City of Dublin.

Table 9.9-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	N/A

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Dublin.

Table 9.9-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	The city of Dublin has a Communications and Public Information (CPI) Division that reports to the City Manager. The division provides public information officers to various city departments/divisions.
Personnel skilled or trained in website development	Yes	The city of Dublin has a Communications and Public Information (CPI) Division that reports to the City Manager. The division has personnel skilled in website development.
Hazard mitigation information available on your website	Yes	https://dublinohiousa.gov/emergency-preparedness/
Social media for hazard mitigation education and outreach	Yes	Dublin participates in Ohio and National public emergency preparedness campaigns.

Outreach Resources	Available? (Yes/No)	Comment:
Citizen boards or commissions that address issues related to hazard mitigation	Yes	A Community Services Advisory Commission of the City of Dublin was formed to address and to make recommendations to Council on community services, parks and recreation services, natural resources and related issues at the request of Council.
Warning systems for hazard events	Yes	Tornado Sirens and several major parks have lightning prediction systems. The Transportation & Mobility division maintains the tornado sirens while the parks division maintains the lightning prediction systems.
Natural disaster/safety programs in place for schools	Yes	Dublin City Schools conduct regular fire evacuation drills, tornado drills, and lock down drills.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Yes	https://dublinohiousa.gov/emergency-preparedness/

Community Classifications

The table below summarizes classifications for community programs available to the City of Dublin.

Table 9.9-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Dublin does participate. Our Building Code Effectiveness Grading Classification is a 3 for Commercial and Industrial property and a 4 for 1 and 2 family residential property. Date of Classification 1/29/2020.	1/29/2020
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	ISO Class One	12/6/2022
Storm Ready Certification	No	N/A	N/A

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.9-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.9.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Dublin.

Table 9.9-9. NFIP Summary

Municipality	Policies in Force	Number of Paid Claims*	Amount of Paid Claims*	Number of NFIP RL Properties	Number of NFIP SRL Properties
Dublin City	52	8	\$40,054.99	1	0

Sources: a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Dublin.

Table 9.9-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No N/A
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No

NFIP Topic	Comments
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	<p>SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.</p> <p>According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).</p>
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	None
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	Yes
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Division of Engineering and Division of Public Service
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Dublin has access to outside resources as necessary (e.g., The Ohio State University)
Does your floodplain management staff need any assistance or training to support its floodplain management program?	FEMA sponsored training
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Chapter 151 – Flood Control – provides outline of administrative services – e.g., performance of reviews
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	This is determined through the plan review process conducted by Review Services.
What are the barriers to running an effective NFIP program in the community, if any?	Residents contacting the city to ask.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	No
<ul style="list-style-type: none"> If so, state the violations. 	
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A

NFIP Topic	Comments
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Chapter 151: Flood Control 151.09 – Methods of Reducing Flood Losses Jul 17, 1995 Provisions for Flood Hazard Reduction 151.20 to 151.23 Chapter 153.111 – Flood Plain Regulations
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Exceeds. The review process involving Review Services.
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Chapter 151 – Flood Control Chapter 153.111 – Flood Plain Regulations Chapter 53 – Stormwater Management and Stream Protection All development applications are reviewed for compliance with floodplain regulations, stormwater management, and other applicable hazards risks. This analysis is provided to the required reviewing body for review prior to a determination on a development application.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.9.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.9-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	1	-	0	-	0	-	1	-	0
Multi-Family	-	0	-	0	-	0	-	0	-	0
Other (commercial, mixed-use, etc.)	-	1	-	0	-	0	-	1	-	1
Total Permits Issued	-	2	-	0	-	0	-	2	-	1

Table 9.9-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Towns on the Parkway	Residential	154 townhomes	273-013211 273-008811	N/A	Status: Zoning Approval and under construction Desc: 154 attached single-family units in 29 building on an 11-acre site.
Hyland Glen	Residential	102 single family homes	7270 Hyland Croy Road	N/A	Status: Zoning Approval Desc: 102 single family homes on 42.5-acres



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Mount Carmel Hospital	Commercial	203,000SF Hospital 51,500 SF Medical Office building	4105 Emerald Parkway	N/A	Status: Zoning Approval and under construction. Desc: 230,000 SF inpatient hospital with ambulatory care facility and 51,500SF outpatient medical office building on 35-acres
Van Trust Industrial	Flex/Industrial	140,000 SF Flex/Industrial Bldg	6777 Crosby Ct.	N/A	Status: Zoning approvals, under construction Desc: 140,000SF flex/industrial building.
The Bailey	Residential	87 senior housing units in a 6-story building		N/A	Status: Zoning approvals, in permit review Desc: 87 senior housing units in a 6-story building on 1.77-acres
Oak Park	Residential	12 single family lots		N/A	Status: Zoning approvals, no permits issued Desc: 12 single family lots within an existing subdivision on 3.47-acres.
Ayrshire Farms	Residential	30 single family lots	SE corner Shier Rings Road and Cosgray Road	N/A	Status: Zoning approvals, pursuing building permits. Desc: 30 single family lots on an 11.37-acre site.
Bridge Park, Block G	Mixed Use	Three buildings: 123,000SF commercial and office uses, 327-space parking garage, four story residential building	North of Bridge Park Avenue between Dale Drive and Mooney Street	N/A	Status: Zoning approval, under construction. Desc: Mixed-use development on 2.29-acre site.
Primrose Daycare	Commercial	16,000SF, two-story daycare	273009147	N/A	Status: Zoning approval, under construction. Desc: Development on 1.37-acres
Turkey Hill Gas Station	Commercial	Gas station, car wash and drive thru restaurant	6201-6233 Avery Rd.	N/A	Status: Construction complete Desc: Development on 5.48-acre site.
Overlook at Tartan Ridge	Residential	56 single family lots	NE corner Hyland Croy and McKittrick Road	N/A	Status: Zoning approvals, under construction. Desc: Development on 24-acre site.
All R Friends	Commercial	One building: 8,100 SF adult day care	273-012214	N/A	Status: Zoning approvals, pursuing construction
Chase Bank	Commercial	One building: 4,100SF bank	6515 Sawmill Rd	N/A	Status: Constructed Desc: Development on a 0.85-acre site.
Avery Road Car Wash	Commercial	One building: 1,500SF car wash	5740 Avery Road	N/A	Status: Constructed Desc: Development on 3.08-acres.
The Corners	Commercial	Three buildings: 23,500SF commercial uses	West of Frantz Rd, North of Rings Road	N/A	Status: Constructed
North Pool	Recreation	Pool building and swimming pools	5660 Dublinshire Dr.	N/A	Status: Constructed
OSU Medical Campus	Institutional	271,850SF medical office and ambulatory care facility	University Blvd	N/A	Status: Constructed Desc: Development located on 33.73-acres.
Columbus Oncology	Commercial	32,000SF medical office building	6700 Perimeter Dr	N/A	Status: Constructed



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
					Desc: Development located on 3.27-acres.
Dublin Rehab Hospital	Institutional	46,000SF rehabilitation hospital building	Emerald Parkway	N/A	Status: Constructed Desc: Development located on 5.76-acres
Hamlet on Jerome	Residential	18 single family lots	SW Manley Road and Corazon Drive	N/A	Status: Constructed Desc: Development on 8.69-acres
Schoedinger Funeral Home	Commercial	12,000 SF funeral home	6100 Perimeter Center Drive	N/A	Status: Constructed Desc: Development on 2.94-acres
Bridge Park, Block D	Commercial/Residential	Four buildings: 12,000SF office, 45,000SF retail, 35,000SF restaurant, 186 residential units and 671 space parking garage	273-012703	N/A	Status: Constructed Desc: Developed on 5.3-acres
Bridge Park, Block A1	Commercial	Four story, 80,000SF office	273-012721	N/A	Status: Constructed Desc: Developed on 0.77-acres
VA Data, Building 5	Industrial	260,000SF data center	6645 Crosby Ct.	N/A	Status: Constructed Desc: 5th building on a 68-acre site
VA Data, Building 4	Industrial	210,000SF data center	6645 Crosby Ct.	N/A	Status: Constructed Desc: 4 th building on a 68-acre site
Urban Air Adventure Park	Commercial	20,000SF indoor recreation use	7679 & 7685 Dublin Plain City Road	N/A	Status: Constructed
Riverside Crossing Park, East Plaza	Recreation	Pavilion, open space, seating, water feature, paths and landscaping	West side of Riverside Drive, north of West Dublin Granville Rd	N/A	Status: Phase 1 constructed
36-38 N High St	Mixed Use	Two-story commercial building and two attached residential units	36-38 N. High Street	N/A	Status: Zoning approval, permits required
CoHatch	Commercial	2.5 story, 10,174SF office building	56 N. High Street	N/A	Status: constructed
Known or Anticipated Major Development in the Next Five (5) Years					
Crawford Hoying Condo/Hotel	Residential/Commercial	3 buildings over podium parking	273-012909 273-008269	N/A	Status: Introductory phase (no zoning approval) Desc: Hotel, condo and conference buildings with podium parking
Casto Village Parkway	Residential	184 multiple family units	6801 Village Parkway	N/A	Status: Concept Plan approval, additional zoning approvals required Desc: Multiple family development with 184 units on a 3.71-acre site.
Multi-Tenant Commercial	Commercial	6,760 SF commercial building	4000 W. Dublin Granville Road	N/A	Status: Preliminary approval, Final approval needed. Desc: One-story 6,760SF commercial building on a 1.98-acre site.
Bright Road Senior Housing	Institutional	408,000SF institutional use for 55+ residents	NE corner Bright Rd and Emerald Pkwy	N/A	Status: Introductory phase (no zoning approval) Desc: Multiple building for 55+ residents on 22-acres.

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Amlin Crossing	Residential	500 residential units	East side of Cosgray Rd. south of the intersection with Rings Road	N/A	Status: Introductory phase (no zoning approval) Desc: Single-family development with 500 detached and attached units on a 101-acre site.
Cardinal South	Residential/Commercial	Residential, office and parking garage	West side of Dublin Road, south of Emerald Parkway	N/A	Status: Introductory phase (no zoning approval)

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.9.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Dublin's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Dublin has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.9-1. City of Dublin Hazard Area Extent and Location Map - Flood

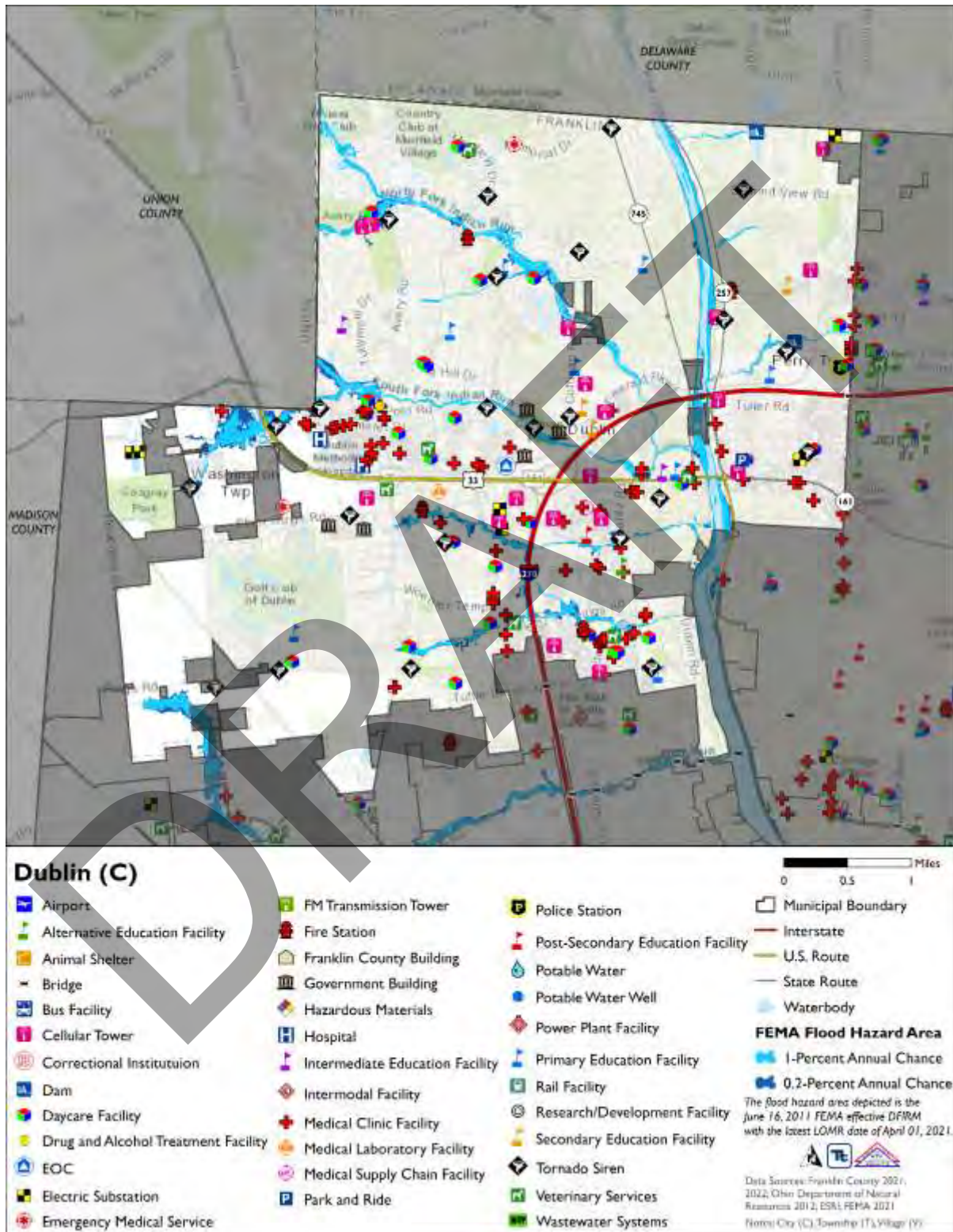
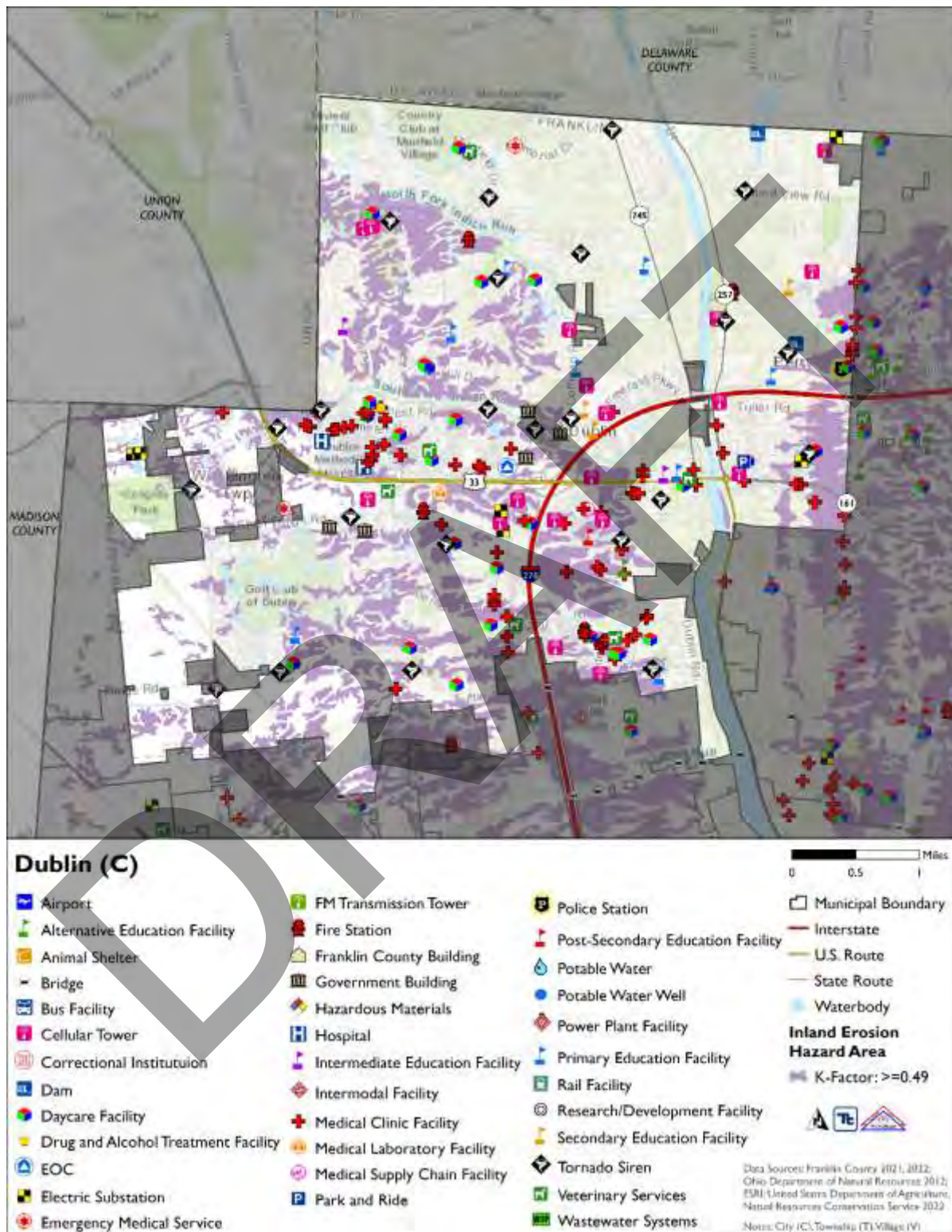


Figure 9.9-2. City of Dublin Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Dublin's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Dublin experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.9-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 2020-May 2023	Covid-19 Pandemic (DR-4507)	Yes	<p>The COVID-19 pandemic was a global health crisis that originated in late 2019 in the city of Wuhan, Hubei Province, China. The disease was caused by a novel coronavirus called SARS-CoV-2. It quickly spread throughout China and eventually reached countries worldwide, leading to the declaration of a global pandemic by the World Health Organization (WHO) on March 11, 2020.</p> <p>As of June 15, 2023, there have been over 550 million confirmed cases of COVID-19 and over 6.3 million deaths worldwide.</p> <p>The United States has been the most heavily affected country, with over 80 million cases and over 1 million deaths.</p> <p>The COVID-19 pandemic had profound social, economic, and political impacts globally. Countries faced significant challenges in terms of healthcare capacity, vaccine distribution, and mitigating the economic fallout. The pandemic disrupted industries, leading to business closures, job losses, and economic recessions in many parts of the world.</p>	<p>The City of Dublin incurred financial losses in recreation and hotel motel revenues, some of which are likely permanent such as the reduction in business travel.</p> <p>The City of Dublin received \$2,567,777.37 in 2020 and \$4,279.60 in 2021 from the COVID Relief Reimbursement</p> <p>The City of Dublin received \$2,568,338.84 in 2021 and \$2,588,845.63 in 2022 from the Local Fiscal Relief Funding (ARPA).</p> <p>In total, the City of Dublin received \$7,729,241.44 in federal dollars under both grant programs.</p>

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Dublin. The City of Dublin reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Dublin indicated the following:

Table 9.9-14. Hazard Ranking Input

Hazard/Vulnerability	Ranking
Dam/Levee	Medium
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.9-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Dublin

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	3	3
0.2-Percent Annual Chance Flood Event Hazard Area	6	5
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	87	79
Subsidence (Karst/Carbonate Rock) Hazard Area	205	181
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Dublin identified the following vulnerabilities within its community:

- Planning for the O'Shaughnessy Dam
- Planning for debris management
- Managing invasive species
- Providing support to vulnerable populations in extreme heat/cold
- Stormwater management
- *The entire watershed of Indian Run Creek has been compromised by excessive development and storm water runoff into bodies of water that were never meant to handle the excess and have been inadequately prepared for it.
- *I think it's really great that steps are being taken to be prepared. It's not really common knowledge to take the steps to mitigate & be prepared. I think incentives & more campaigns are important.

9.9.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan

update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.9-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Install safe rooms/wind shelters in all public parks/existing buildings	Parks/City of Dublin	No Progress	No	This project is too large for the city to take on due to the large number of parks, costs, and the requirements necessary to build "safe rooms" and/or "wind resistant shelters". This should NOT be included in the 2023 HMP - DISCONTINUE	Parks Development / Parks and Recreation
Replace wood poles with concrete ones if damaged. Wind resistant and meet specifications	AEP; Contractor; /Public Works	No Progress	No	Poles are owned by a private entity (e.g., AEP – American Electric Power) and the decision on replacement materials is up to them. *Note some poles have replaced by metal ones. This should NOT be included in the 2023 HMP - DISCONTINUE	American Electric Power (AEP) – Private Entity
Bury select electric utility lines and poles	AEP; Contractor; Public Works, Engineering, City of Dublin	Ongoing	No	Poles and lines are owned by a private entity (e.g., AEP – American Electric Power) and the decision on replacement materials is up to them. *Note some poles have replaced by metal ones. Dublin does encourage and supports this, but does not have final say on private company determination. This should NOT be included in the 2023 HMP - DISCONTINUE	American Electric Power (AEP) – Private Entity
Stormwater retention pond mucking/cleaning/sediment removal	Public Works, Engineering, City of Dublin	Ongoing	Yes	Prevention of flooding and prevention of losing capacity if not functioning properly.	Division of Engineering
Seek funding for back-up generators for critical public buildings and/or infrastructure	Facilities and Engineering	Complete	No	City facilities have back-up power and all traffic signals in the city have battery back-up power. This	Division of Facilities and Division of Transportation & Mobility

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
				project has been completed and should not be a part of the 2023 HMP. DISCONTINUE	
Seek funding for the purchase, replacement, and/or upgrading of Lightning detection/warning systems for city parks/pools,	Parks	Ongoing Capability	Yes	Lighting risks to park and pool patrons. These systems have routine maintenance, repair, and replacement. Additional parks may be added in the future.	Public Service
Develop and implement public education programs to increase public awareness and understanding of the risks associated with natural hazards	CPI	Ongoing Capability	Yes	This is an ongoing capability for public education (we do this as needed and regularly, such as weather awareness weeks, etc.).	Communications & Public Information (CPI)

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Dublin identified the following mitigation efforts completed since the last HMP:

- None

Since the adoption of the County's first HMP, the City of Dublin has made significant mitigation progress in the following areas:

- Flood mitigation
- Back-up power resources
- Public Education

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Dublin participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.9-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	X	-	X	X	-	-	-	-	X
Disease Outbreak	-	X	-	X	X	-	-	-	-	X
Drought	-	X	-	X	X	-	-	-	-	X
Earthquake	-	X	-	X	X	-	-	-	-	X
Extreme Temp	-	X	X	X	X	-	-	-	-	X
Flood	-	X	X	X	X	-	-	-	X	X
Geologic	-	X	X	X	X	-	-	-	-	X
Invasive Species	X		-	X	X	X	-	-	-	
Severe Summer Weather	-	X	-	X	X	-	-	-	X	X
Severe Winter Weather	-	X	-	X	X	-	-	-	X	X
Tornado	-	X	-	X	X	-	-	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.9-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Dublin will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.9-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
001-Dublin-2023	O'Shaughnessy Dam Emergency Action Plan Annex	<p>Problem: Dams and levees are important infrastructure that can provide a variety of benefits, such as flood control, water supply, and hydropower. However, they also pose a risk of failure, which can have devastating consequences. The consequences of dam or levee failure can be devastating. A dam failure can release a large volume of water, which can cause widespread flooding and destruction. The O'Shaughnessy Dam is located north of Dublin and owned/operated by the City of Columbus.</p> <p>Solution: The O'Shaughnessy Dam is located north of the City of Dublin. A failure of the dam could have negative impacts on the City of Dublin. In order to prepare for a response to a dam failure, an annex will be added to the City of Dublin's Emergency Operations Plan (All-Hazard Plan) that contains select elements from the O'Shaughnessy Emergency Action Plan. This annex will enhance Dublin's local emergency operations plan.</p>	Dam and Levee Failure, and Flood	2,4,5	2024	Emergency Management Coordinator and the Office of the City Manager	FPMS, National Dam Safety Program, Small Flood Control	The benefit of adding this annex will be increased awareness for city staff in preparations for a response to a dam failure event. It will help recognize and identify the potential impact(s) of a dam failure to the city.	No cost other than employee time adding the annex.	Medium	LPR	PR
002-Dublin-2023	Immunization/Vaccination Communication	<p>Problem: Disease outbreaks can have a significant impact on public health, causing illness, death, and economic disruption.</p>	Disease Outbreak	4, 5	On-going; 2023 to 2027	Communications and Public Information (City of Dublin), Franklin County	Unknown	The promotion of immunization/vaccination throughout the Dublin community will hopefully reduce	None other than the employee costs of performing this	Medium	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<p>They can also lead to social unrest and fear.</p> <p>Solution: In an attempt to lessen the impact of disease outbreaks, the City of Dublin in cooperation with the Franklin County Health Department will promote immunization/vaccination throughout the Dublin community. The intent of this communication is to promote awareness and education about the benefits of immunization/vaccination to assist in lessening the impact (illness, death, economic disruption, etc.) of disease outbreaks in the community.</p>				Public Health (contracted by the City of Dublin)		illness, death, economic disruption, and promote better public health in the community.	function and the use of any video-audio strategies through social media.			
003-Dublin-2023	Earthquake Exercise Promotion	<p>Problem: Earthquakes are a natural hazard that can cause widespread damage and loss of life. They are caused by the sudden release of energy in the Earth's crust, and can occur anywhere on Earth. Earthquakes can cause: ground shaking, landslides, fires, building collapses, structural damage, and injuries/deaths. Ohio is on the periphery of the New Madrid Seismic Zone.</p> <p>Solution: The City of Dublin will promote the "Great Shake Out" Earthquake drill to residents, businesses, and schools. Great ShakeOut earthquake drills are an opportunity to practice how to be safer during earthquakes: "Drop, Cover and Hold On." ShakeOut also has been organized to encourage you, your community, your school, or your organization to update emergency plans and supplies, and to</p>	Earthquake	4, 5	Annual exercise promotion for 2023 to 2027.	Communications and Public Information (CPI)	Emergency Relief (ER) Program	Many areas of the globe are prone to earthquakes (see links below) You could be anywhere when an earthquake strikes: at home, at work, at school or even on vacation. The purpose of the exercise is to promote preparedness to survive and to recover quickly from an earthquake event.	No cost other than employee work to promote the exercise.	Medium	EAP	PI



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		secure your space in order to prevent damage and injuries.										
004-Dublin-2023	Salt Barn Storage Capacity	Problem: In the City of Dublin, there is a need to increase storage capacity in the City's salt barns. Current capacity is 4,000 tons and the barns are in fair to poor condition. Solution: The City of Dublin plans to design and build a new salt barn with a capacity level of 8,000 – 10,000 tons. This facility will also house our liquid wetting systems.	Severe Winter Weather	2, 4	This project is currently in the City of Dublin's Capital Improvements Program (CIP) budget for 2026. Completion could occur in 2026 or 2027.	Public Service	Unknown	Increased storage and salt capacity for severe winter weather events.	\$1,130,000.00	Medium	SIP	PP
005-Dublin-2023	Debris Management Plan	Problem: The City of Dublin currently does not have a formalized comprehensive Debris Management Plan. Solution: The City will work in conjunction with consultants and other local and county agencies to develop a written formalized and comprehensive Debris Management Plan.	Tornado, Severe Summer Weather, Flood, Dam and Levee Failure, Severe Winter Weather, and Earthquake	6, 4	End of 2025	Public Service	Disaster Assistance Programs, Emergency Watershed Protection Program (EWPP), Public Assistance 404 and 406 Program, Public Assistance (PA) Program	Establish formalized procedures and guidelines for debris management.	\$12,000.00+	Medium	LPR	PR
006-Dublin-2023	Invasive Species - Tree Program	Problem: About 22% or more than 500 species are not native to Ohio. Without natural controls, invasive non-native plants are able to spread and out compete native species Within Dublin, several invasive species are readily present. Honeysuckle, Autumn-olive, Garlic Mustard & Multflora Rose are all examples of non-native plants that we focus on. Solution: There is currently no solution to this problem. The City attempts to manage	Invasive Species	3, 4, 5	Ongoing - 2023 to 2027 and beyond	Public Service, Engineering, Communications & Public Information	Five Star and Urban Waters Restoration Grant Program, Urban Canopy Restoration Grant	Attempt to manage invasive spread throughout Dublin and its impacts on native trees and plants.	\$20,000 - \$30,000+ annually	Low	NSP/EAP	NR, PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		invasive through several programs and maintenance functions. Examples of these programs include the Storm water Maintenance Program, Woodlot Maintenance Program and Volunteer Programs. City staff also works throughout the year on invasive management with City parks and on City property.										
007-Dublin-2023	Warming/Cooling Center	<p>Problem: Extreme temperatures are a major problem that can have a significant impact on human health, infrastructure, and the environment. They can be caused by a variety of factors, including: climate change, natural variability, and human activity. The effects of extreme temperature can lead to: heat stress, heat stroke, cold stress, health problems, infrastructure damage, and environmental damage.</p> <p>Solution: The City of Dublin will utilize the Dublin Community Recreation Center (DCRC) as a designated warming and/or cooling center in the event of an extreme temperature event. In addition to providing a warming and/or cooling center, citizens could also plug electronic devices (e.g., cell phones) in for re-charging. Also, water fountains and/or bottled water "may" be available. The warming and/or cooling center would only be available during regular DCRC operating times. The Recreation Services division will create a memo/directive to operate this warming/cooling center.</p>	Drought, and Extreme Temperature	4, 5	On-Going - 2023 to 2027	Recreation Services	Private Donations (e.g., American Electric Power - AEP donating bottled water)	Citizens affected by extreme temperatures would have a location they could go to for warming and/or cooling, they would be able to re-charge electronic devices (e.g., cell phones), and they would have access to water fountains and restroom facilities.	Costs limited to purchasing of any items related to extreme temperature events (<\$5,000.00).	Medium	LPR/EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
008-Dublin-2023	Waterways Maintenance Program	<p>Problem: Erosion occurring along the banks of waterways, open channels and streams located in City-owned areas or areas where the City has maintenance responsibility through an established easement.</p> <p>Solution: The City has developed and instituted a Waterways Maintenance Program, which provides for the maintenance of waterways, open channels, and streams located in City-owned areas or areas where the City has maintenance responsibility through an established easement. The Program provides funding to address areas of erosion identified through waterway inspections, and provides for bank stabilization. The proper operation of our waterways is critical to ensuring the conveyance of stormwater runoff and reduction of the occurrence of flooding and damage to infrastructure due to channel erosion. Reducing areas of erosion can improve the sediment loading on a waterway, improving aquatic habitat and reducing turbidity in the water.</p>	Flood, and Geologic	3, 5	Ongoing – 2023 - 2027 and beyond through the Capital Improvements Program	Engineering	CIP Budget; HDBE, State of Ohio (Recovery Strategies, Assistance Programs), SCRP, FEMA FMA, HMGP, and BRIC, Five Star and Urban Waters Restoration Grant Program, Rivers, Trails, and Conservation Assistance Program, Partners in Watershed Management Grant Program, Emergency Watershed Protection (EWP) Program, Flood Plain Management Services (FPMS) Program, Small Flood Control, Disaster Supplemental Funding	Ensuring the conveyance of stormwater runoff and the reduction of erosion and flooding.	Approximately \$350,000.00 to \$400,000.00 annually	Medium	NSP	NR
009-Dublin-2023	Stormwater Management & Stream Protection	<p>Problem: Flooding caused by rainfall events producing stormwater runoff that exceeds the capacity of the City's stormwater management system (catch basins, pipes and detention/retention basins), culverts, waterways, open channels and streams.</p> <p>Solution: Enforcement of Chapter 53 of the Dublin Codified Ordinances –</p>	Flood, Severe Summer Weather	3	Ongoing – 2023 - 2027 and beyond through the Capital Improvements Program.	Engineering	CIP Budget, State Recovery Strategies (Ohio), Assistance Programs (Ohio), Community Challenge Planning Grants, SCRP Grants; FEMA's BRIC, FMA, PA, and HMGP; Five Star and Urban Waters Restoration	Reduce occurrence and/or frequency of flooding.	Approximately \$500,000 to \$650,000 annually	High	NSP	NR



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Stormwater Management and Stream Protection, enforcement of Chapter 151 of the Dublin Codified Ordinances – Flood Control, enforcement of the City's Stormwater Design Manual, implementation and execution of the City's Waterways Maintenance Program, execution of the City's Annual Stormwater Maintenance Program, and routine maintenance of the City's stormwater management system by City maintenance staff.					Grant Program, Rivers, Trails, and Conservation Assistance Program, Partners in Watershed Management Grant Program, Emergency Watershed Protection (EWP) Program, Flood Plain Management Services (FPMS) Program, Small Flood Control, Disaster Supplemental Funding, National Flood Insurance Program (NFIP)					
010-Dublin-2023	Public Water and Sanitary Sewer Extensions	<p>Problem: Reduced and/or diminished domestic water supply from residential ground water wells serving homes in the City during a period of abnormally dry weather sufficiently prolonged for the lack of water to cause a serious hydrologic imbalance in the affected area. Homes whose water supply is provided by wells are typically located in areas of Dublin where City provided water service is not available.</p> <p>Solution: The City has an adopted Public Water and Sanitary Sewer Extensions to Existing Developed Property Policy, which has defined project areas to extend public water system infrastructure to residential properties not having public water service. The purpose of the policy is to establish an equitable, documented, uniform and</p>	Flood, Severe Summer Weather, Drought	4, 5	Ongoing – 2023 - 2027 and beyond Capital Improvements Program.	Engineering	City Budget	Provide public water system infrastructure to properties not currently served to allow for the removal of existing ground water wells.	Approximately \$2,000,000 to \$4,000,000 annually.	Medium	SIP	PP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		systematic mechanism by which the City of Dublin can plan and extend its public water and/or sanitary sewer utility services to those developed areas not currently served. This will allow for the removal of existing ground water wells and will provide additional fire protection services.										

*Mitigation initiative is related to a critical facility and/or community lifeline
Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.9-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
001-Dublin-2023	O'Shaughnessy Dam Emergency Action Plan Annex	1	1	0	1	1	1	1	0	0	1	1	1	1	0	10	Medium
002-Dublin-2023	Immunization/Vaccination Communication	1	0	1	1	1	1	1	0	0	1	0	1	1	0	9	Medium
003-Dublin-2023	Earthquake Exercise Promotion	1	0	1	0	1	1	1	0	0	1	0	1	1	0	8	Medium
004-Dublin-2023	Salt Barn Storage Capacity	0	1	0	0	0	0	0	1	0	1	0	1	0	0	4	Medium
005-Dublin-2023	Debris Management Plan	0	0	1	1	1	1	1	1	0	1	1	1	1	0	10	Medium
006-Dublin-2023	Invasive Species - Tree Program	0	0	1	1	1	1	0	1	0	1	0	0	0	0	6	Low
007-Dublin-2023	Warming/Cooling Center	1	0	1	0	1	1	1	0	0	1	1	1	0	0	8	Medium
008-Dublin-2023	Waterways Maintenance Program	0	0	1	1	1	1	0	1	0	1	1	0	0	0	7	Medium
009-Dublin-2023	Stormwater Management & Stream Protection	0	1	1	1	1	1	0	1	0	1	0	0	1	1	9	High
010-Dublin-2023	Public Water and Sanitary Sewer Extensions	1	1	0	0	1	1	0	0	0	1	1	0	0	0	6	Medium

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.10 TOWNSHIP OF FRANKLIN

This section presents the jurisdictional annex for the Township of Franklin that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Franklin participated in the planning process, an assessment of the Township of Franklin's risk and vulnerability, the different capabilities used in the Township of Franklin, and an action plan that will be implemented to achieve a more resilient community.

9.10.1 Hazard Mitigation Planning Team

The Township of Franklin identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Franklin departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.10-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Steve Mazer, Township Administrator	Name/Title:	-
Address:	2193 Frank Road Columbus, Ohio 43223	Address:	-
Phone Number:	614-279-9411	Phone Number:	-
Email:	smazer@franklin-township.com	Email:	-
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.10.2 Municipal Profile

The Township of Franklin is in the center of Franklin County and is bordered by Montgomery Township to the east, Jackson Township to the south, Prairie Township to the west and Norwich, Perry and Clinton Townships to the north. Parts of Franklin Townships. With few exceptions, these islands are completely surrounded by the city of Columbus, as a majority of the Township has been annexed by the City of Columbus.

According to the American Community Survey, the 2021 population for the Township of Franklin was 11,312, a 10.14 percent increase from the 2010 Census population of 10,271. Data from the 2021 American Community Survey indicates that 8.1 percent of the population is 5 years of age or younger and 13.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.10.3 Jurisdictional Capability Assessment and Integration

The Township of Franklin performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Franklin to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Franklin and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.10-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Franklin County Building Code 2019 Residential Code of Ohio O.R.C. 4101.08 Franklin Township Manages Commercial Building Board of Building Standards O.R.C. 3781.10 (E)	Franklin County	Franklin County Zoning
<i>How does this reduce risk?</i>				
Zoning/Land Use Code	No	Franklin County Zoning O.R.C. 303.02	Franklin County	Franklin County Zoning
<i>How does this reduce risk?</i>				
Subdivision Ordinance	No	Franklin County Subdivision Regulations O.R.C. 711	Franklin County	Franklin County Zoning
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	Franklin County Stormwater Partnership. County Resolution 503.03	Franklin County	Franklin County Engineer
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	Franklin County Planning Commission. Chapter 711 of the O.R.C.	Franklin County	Franklin County and the township
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	Franklin County Planning Commission. Chapter 711 of the O.R.C.	Franklin County	Franklin County and the township
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	No	Franklin County Flood Plain Administration. Implemented on September 20, 1978	Franklin County	Franklin County Zoning
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Franklin County Emergency Management & Homeland Security. Township resolution pending	Franklin County	Franklin County Emergency Management and Franklin Township
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Southwest Area Plan Westland Area Interim Development Framework	Local	Southwest Area Commission Franklin Township
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	Franklin County Stormwater Partnership. County resolution 503.03. Franklin County Subdivision Regulations. Chapter 711 of the O.R.C.	Franklin County	County and township
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	Franklin County Flood Plain Administration. Implemented September 20, 1978	Franklin County	Franklin County Zoning
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Ohio Emergency Management Agency. Develop a stormwater management. Chapter 5502 of the O.R.C.	State of Ohio	State, county, and township
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	Yes	Franklin County Flood Plain Administration and Franklin County Engineer O.R.C. chapter 711	Franklin Township	Franklin County
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	O.R.C. 1503	State of Ohio	State of Ohio
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Pending Resolution	Township	Township
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	Yes	Pending Resolution	Township	Township
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Pending resolution	Township	Township

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
How does this reduce risk?				

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Franklin to oversee and track development.

Table 9.10-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Franklin County Zoning
If you do not issue development permits, what is your process for tracking new development?	N/A	Franklin County Zoning
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Franklin County Zoning
Do you have a buildable land inventory? • If yes, please describe	Yes	Township acquires land for residential home building
Describe the level of build-out in your jurisdiction.	N/A	Minimal commercial and residential building at this time

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Franklin and their current responsibilities that contribute to hazard mitigation.

Table 9.10-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Township's affiliation with MORPC
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	Yes	Contracted services. Approves all commercial building permits. Township staff monitors zoning and building permits. Franklin County Zoning for residential building
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Tornado sirens

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Township road department maintains areas prone to flooding. Adds additional drainage and involved with vegetation removal
Mutual aid agreements	Yes	Franklin County Engineer. Area fire departments. Local law enforcement
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? N/A
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	Contracted services
Planners or engineers with an understanding of natural hazards	Yes	Contracted services
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Contracted services
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	Fire Chief
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Township of Franklin.

Table 9.10-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Franklin.

Table 9.10-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Administrative assistant proficient with social media outlets and website development
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Tornado sirens
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Township of Franklin.

Table 9.10-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.10-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.10.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Franklin.

Table 9.10-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Franklin (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Franklin.

Table 9.10-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Yes. List of homeowners with addresses are maintained by the township. Whims Ditch
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	At this time there are no homeowners seeking mitigation. Franklin County maintains a list of property owners.

NFIP Topic	Comments
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway.	None at this time
• How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction?	Through assistance from Franklin County 3 recent floods dating back to 2007
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	21 properties have been acquired in the township. Funded through the Franklin County Engineer
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	No maps. Maps are maintained by Franklin County
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Zoning. Franklin County Engineer
Are any certified floodplain managers on staff in your jurisdiction?	NA
Do you have access to resources to determine possible future flooding conditions from climate change?	Rely on information available from state and county agencies
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Rely on county agencies for support
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Building permits reviewed by the township and Franklin County Zoning The township communicates with homeowners within the flood plain.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County Zoning and the Franklin County Engineer
What are the barriers to running an effective NFIP program in the community, if any?	Personnel and funding
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Franklin County Flood Plain Administration. September 1978
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meet
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	N/A
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Interested in improving the township CRS classification

9.10.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.10-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	-	3	-	0	-	2	-	2	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	70	-	68	-	58	-	73	-	48	-
Total Permits Issued	71	-	71	-	58	-	75	-	50	-

Table 9.10-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.10.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Franklin's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Franklin has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.10-1. Township of Franklin Hazard Area Extent and Location Map

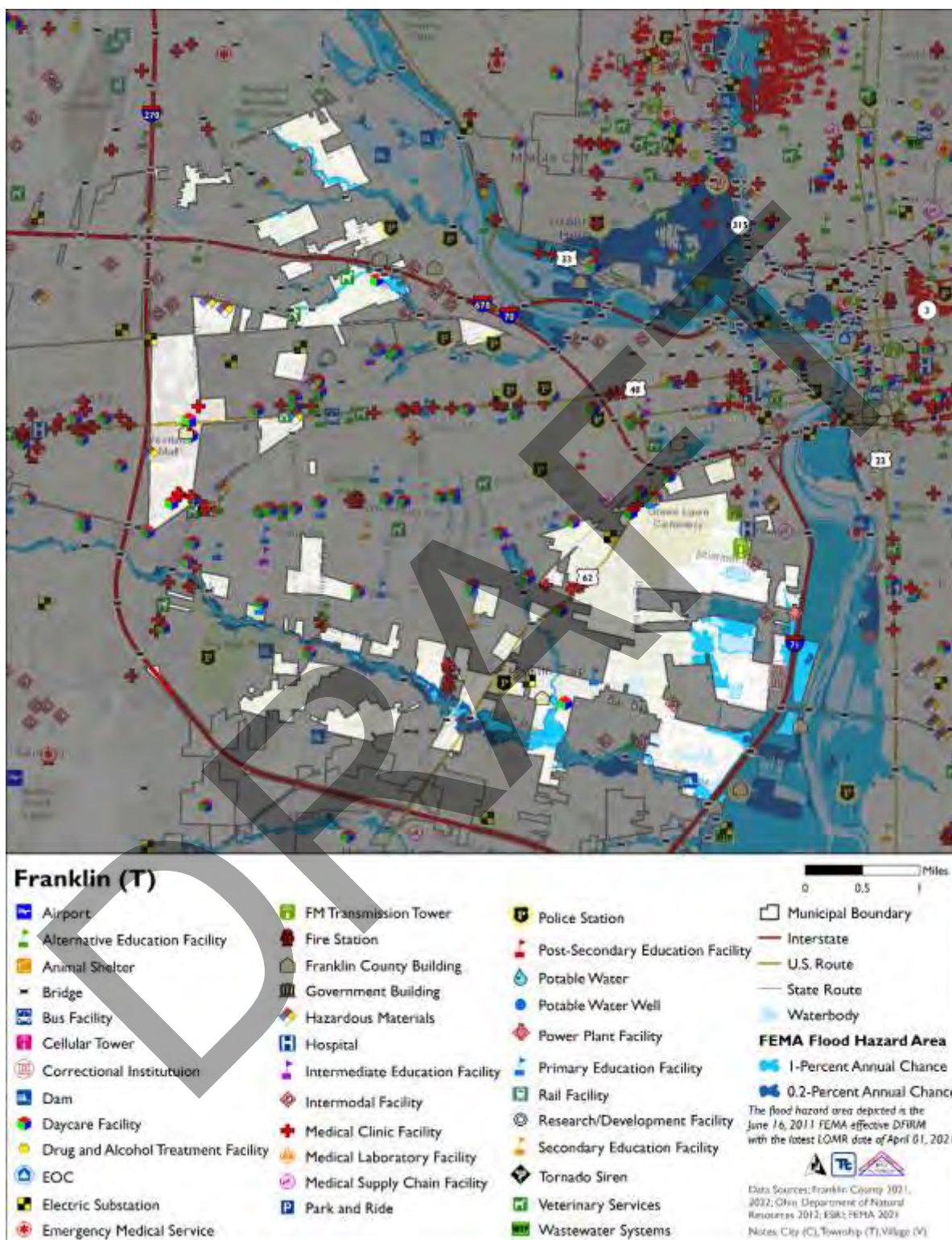


Figure 9.10-2. Township of Franklin Hazard Area Extent and Location Map

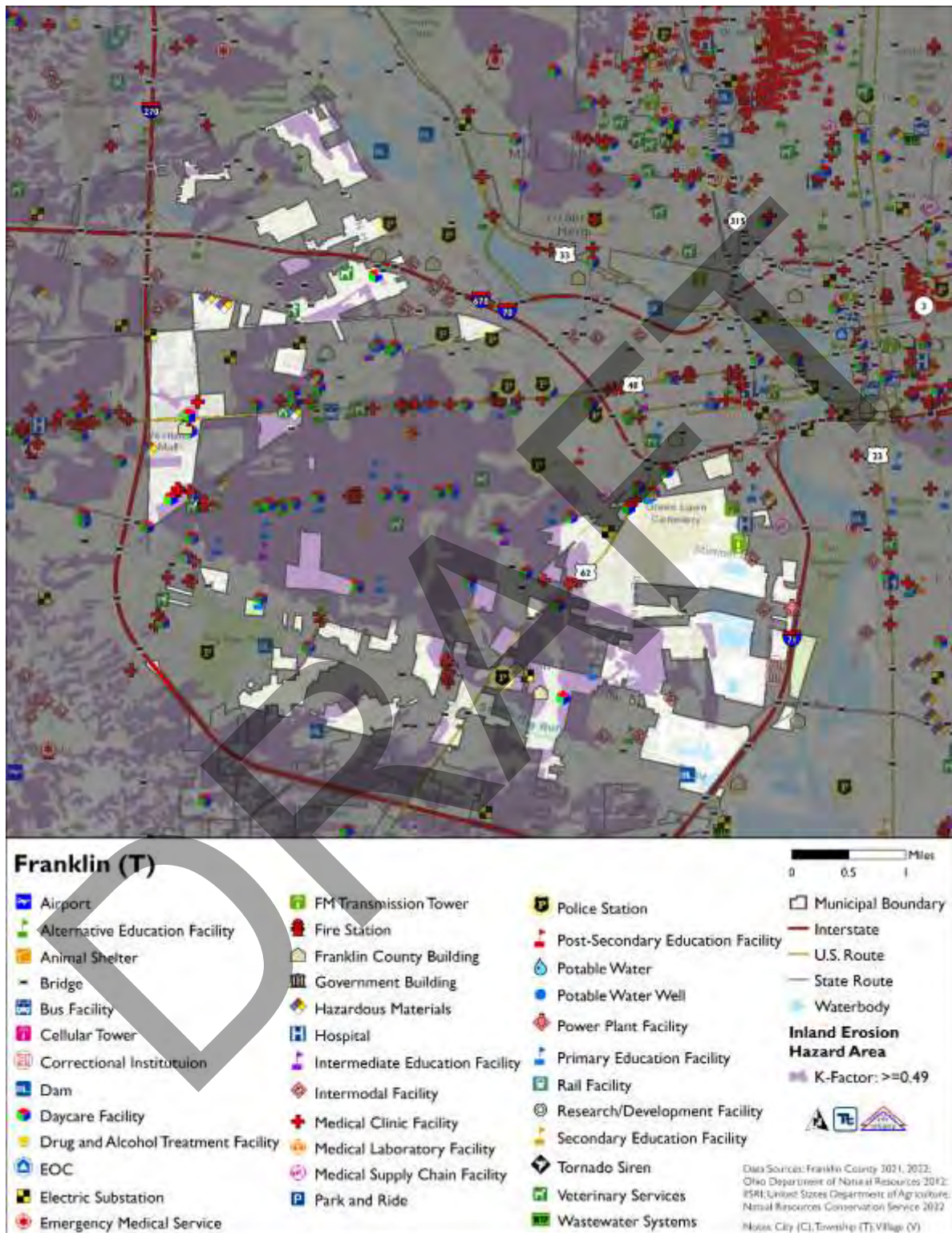
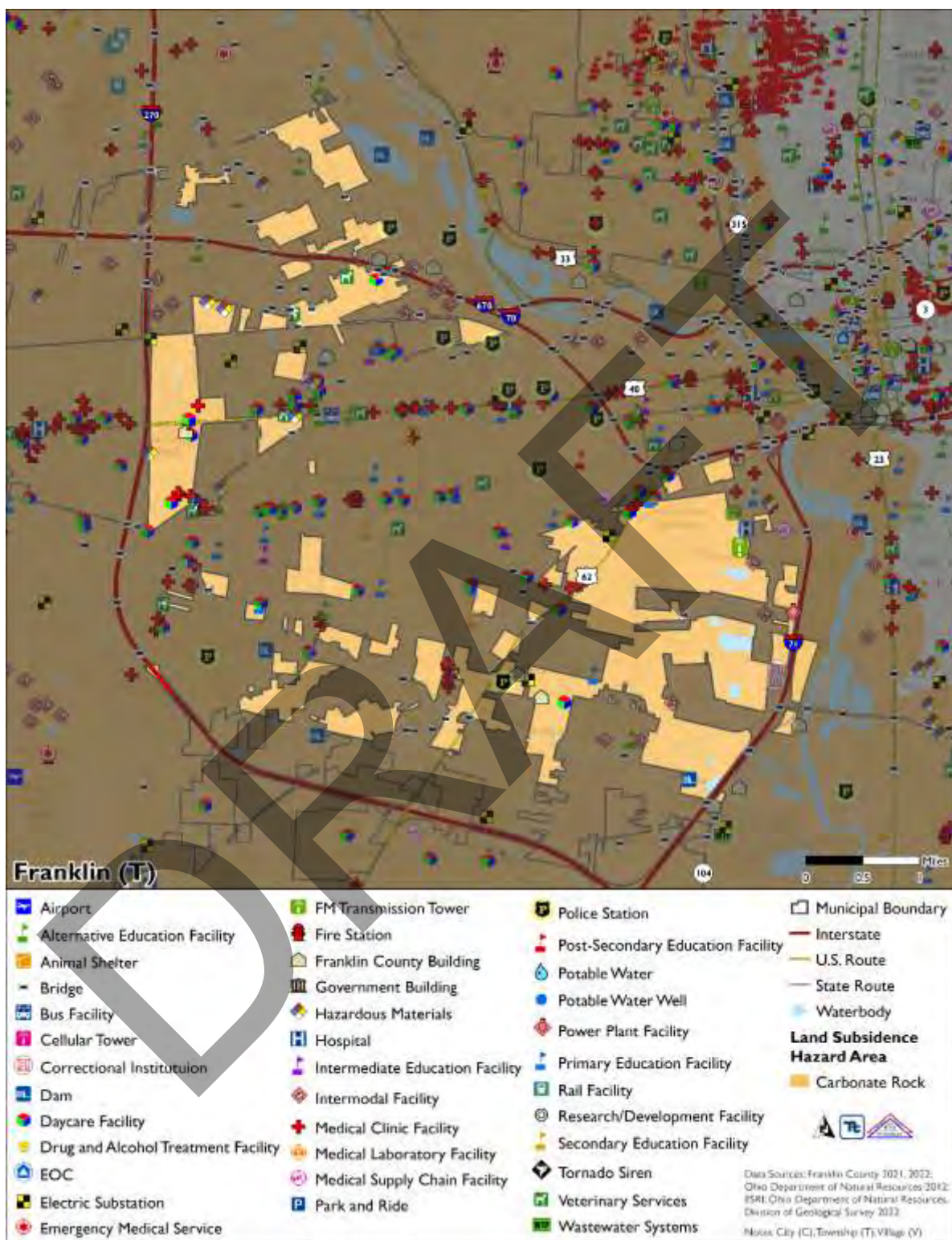


Figure 9.10-3. Township of Franklin Hazard Area Extent and Location Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Franklin Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Franklin Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.10-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
May 2020	Flood	N/A	Thunderstorms caused extensive flooding in the Whims Ditch due to heavy rainfall. 40 people were ordered to leave their home	Thunderstorms caused extensive flooding in the Whims Ditch due to heavy rainfall. 40 people were ordered to leave their home
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Franklin. The Township of Franklin reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Township of Franklin agreed with all of the following hazard risk rankings.

Table 9.10-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.10-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Franklin Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	5	5
0.2-Percent Annual Chance Flood Event Hazard Area	6	6
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	22	19
Subsidence (Karst/Carbonate Rock) Hazard Area	70	64
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	6	6

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Franklin Township identified the following vulnerabilities within its community:

- Franklin Township is trying to address the flood prone issues concerning the Whims Ditch. Improved drainage is being added in an attempt to alleviate some of the flooding during heavy rains.
- The Township does not have a Debris Management Plan developed to address the aftermath of the hazards of concern.
- The Township does not have a Post Disaster Recovery Plan to address the hazards of concern.

- The Township does not have a warning system to notify their residents of incoming hazards or issues relating to the hazards of concerns.

9.10.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.10-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for three repetitive loss structures to permanently reduce damage to these structures. (3 structures @ 300,000 / 2 years)	Township Trustee's Office	No Progress	No	-	-
Develop a comprehensive plan to address habitual flooding in the Whims Ditch area. (100,000 / 1 year)	Township Trustee's Office	Ongoing	No	-	-
Mitigate Minor Flooding Throughout Township. Identify alternative strategies	Township Trustee's Office	In Progress	No	-	-
Increase coverage of tornado sirens in the township	Township Trustee's Office	No Progress	No	-	-
Seek funding for acquisition of properties along Whims Ditch.	Township Trustee's Office	No Progress	No	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Franklin identified the following mitigation efforts completed since the last HMP:

- Franklin Township is trying to address the flood prone issues concerning the Whims Ditch. Improved drainage is being added in an attempt to alleviate some of the flooding during heavy rains.

Since the adoption of the County's first HMP, the Township of Franklin has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.10-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	-	X	-	-	-	X
Disease Outbreak	X	-	-	X	-	X	-	-	-	X
Drought	X	-	-	X	-	X	-	-	-	X
Earthquake	X	-	-	X	-	X	-	-	-	X
Extreme Temp	X	-	-	X	-	X	-	-	-	X
Flood	X	X	-	X	X	X	-	-	X	X
Geologic	X	-	-	X	-	X	-	-	-	X
Invasive Species	X	-	-	X	-	X	-	-	-	X
Severe Summer Weather	X	-	-	X	-	X	-	-	-	X
Severe Winter Weather	X	-	-	X	-	X	-	-	-	X
Tornado	X	-	-	X	-	X	-	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.10-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Franklin Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.10-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Franklin Twp-001	Whims Ditch	<p>Problem: After heavy rains, the Whims Ditch area experiences significant flooding issues. The flooding has been so extensive that residents have relocated and their homes purchased by government agencies. Remaining residents still experience flood damage, roads are closed, and the townships departments are tasked with evacuations. Low lying land, with a ditch through Green Lawn Cemetery near the area of Hart and Richter Roads.</p> <p>Solution: Either remove existing homes or raise them at a minimum of 6.5 feet to reduce flood damage. Install a new stormwater pump and widen an existing ditch.</p>	Flood	1, 2, 3, 4, 5	3 years	Franklin Township, Franklin County, and Federal Emergency Management Agency.	FEMA HMGP, FMA, and BRIC; Township budget	Remove 65 houses, or raise the remaining houses a minimum of 6.5 feet, install a new stormwater pump and widen the existing ditch	\$14,000,000 per U.S. Army Corp of Engineers in 2010.	Medium	LPR, EAP, SIP	PR, PP, SP
2023-Franklin Twp-002	Debris Management Plan	<p>Problem: The Township does not have a Debris Management Plan developed to address the aftermath of the hazards of concern.</p>	Dam/Levee, Drought, Earthquake, Extreme Temperature, Flood,	4, 5	1 Year	Franklin Township	Township Budget	The Township will be better prepared to handle debris management	Staff Time	High	LPR	PP



9.10. Township of Franklin

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The Township will develop a Debris Management plan that integrates the hazards of concern.	Geologic Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado									
2023-Franklin Twp-003	Post Disaster Recovery Plan	Problem: The Township does not have a Post Disaster Recovery Plan to address the hazards of concern. Solution: The Township will develop a Post Disaster Recovery Plan that will integrate the HMP.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	4, 5	1 Year	Franklin Township	Township Budget	The Township will be better prepared to handle the hazards of concern.	Staff Time	High	LPR	PP
2023-Franklin Twp-004	Warning System*	Problem: The Township does not have a warning system to notify their residents of incoming hazards or issues relating to the hazards of concerns. Solution: The Township will develop a text/email warning system to notify residents of issues throughout the	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species,	4, 5	1 Year		FEMA HMGP, FMA, and BRIC; Township budget	The Township residents will be better prepared for hazards.	\$50,000	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Township as well as the surrounding areas.	Severe Summer Weather, Severe Winter Weather, Tornado									

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.10-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Franklin Twp-001	Whims Ditch	1	1	0	0	0	0	0	0	1	0	0	1	1	0	5	Medium
2023-Franklin Twp-002	Debris Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Franklin Twp-003	Post Disaster Recovery Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Franklin Twp-004	Warning System	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.11CITY OF GAHANNA

This section presents the jurisdictional annex for the City of Gahanna that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Gahanna participated in the planning process, an assessment of the City of Gahanna's risk and vulnerability, the different capabilities used in the City of Gahanna, and an action plan that will be implemented to achieve a more resilient community.

9.11.1 Hazard Mitigation Planning Team

The City of Gahanna identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Gahanna departments, including Department of Emergency Services. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.11-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Kevin Schultz/Senior Director of Operations	Name/Title:	Laurie Jadwin/Mayor
Address:	200 S. Hamilton Rd Gahanna	Address:	200 S. Hamilton Rd Gahanna
Phone Number:	614.342.4042	Phone Number:	614.342.4045
Email:	kevin.schultz@gahanna.gov	Email:	laurie.jadwin@gahanna.gov
NFIP Floodplain Administrator			
Name/Title:	Tom Komlanc/Director of Engineering		
Address:	200 S. Hamilton Rd Gahanna		
Phone Number:	614.342.4050		
Email:	Tom.komlanc@gahanna.gov		
Additional Contributors:			
Name/Title:	Larry Rinehart		
Method of Participation:	Direct		

9.11.2 Municipal Profile

The City of Gahanna is in the center east area of Franklin County and is bordered by Jefferson Township to the east, Blendon Township to the north, Mifflin Township and Columbus City to the south and to the west. Gahanna contains parts of Big Walnut Creek within its boundaries and is extremely close to Rocky Fork Creek.

According to the American Community Survey, the 2021 population for the City of Gahanna was 35,626, a 7.15 percent increase from the 2010 Census population of 33,248. Data from the 2021 American Community Survey indicates that 5.3 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.11.3 Jurisdictional Capability Assessment and Integration

The City of Gahanna performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Gahanna to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Gahanna and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.11-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part 13 – Building Code - 2007	Local	Building Dept.
<p><i>How does this reduce risk?</i></p> <p>The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following:</p> <p>(a) Performance. Establish such requirements, in terms of performance objectives for the use intended.</p> <p>(b) <i>Extent of Use.</i> Permit to the fullest extent feasible, the use of materials and technical methods, devices, and improvements which tend to reduce the cost of construction without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction.</p> <p>(c) <i>Standardization.</i> To encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units.</p>				
Zoning/Land Use Code	Yes	Part 11.03 – Zoning	Local	Zoning Dept.
<p><i>How does this reduce risk?</i></p> <p>The fulfillment of this purpose is to be accomplished by seeking:</p> <p>(a) To encourage and facilitate orderly, efficient and appropriate growth and development.</p> <p>(b) To establish population densities to prevent or reduce congestion and to secure economy in the cost of providing water supply and sewerage systems, streets and highways, fire and police protection, schools, parks and recreation facilities, and other governmental services.</p> <p>(c) To zone all properties with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the City.</p> <p>(d) To protect residential, business, commercial and industrial areas alike from harmful encroachment by incompatible uses and to ensure that land allocated to a class of uses shall not be usurped by other uses inappropriate to the class.</p> <p>(e) To avoid the inappropriate development of lands and provide for adequate drainage, curbing of erosion and reduction of flood damage.</p> <p>(f) To foster a more rational pattern of relationship between residential, business, commercial and manufacturing uses for the mutual benefit of all.</p>				
Subdivision Ordinance	Yes	Part 11.01 – Subdivision	Local	Planning Dept.
<p><i>How does this reduce risk?</i></p> <p>Subdivision means the division of any parcel of land shown as a unit or as contiguous units on the last preceding tax roll, into two or more parcels, sites or lots, any one of which is less than five acres for the purposes, whether immediate or future, of the transfer of ownership, provided, however, that the partition of land into parcels of more than five acres not involving any new streets or easements of access, and the sale or exchange of parcels between adjoining lot owners, where such sale or exchange does not create additional building sites, shall be exempted; or the improvement of one or more parcels of land for residential, commercial or industrial structures or groups of structures involving the division or allocation of land for the opening, widening or extension of any street or streets, except private streets serving industrial structures, the division or allocation of land as open spaces for common use by owners, occupants or lease holders or as easements for the extension and maintenance of public sewer, water, storm drainage or other public facilities.</p>				
Site Plan Ordinance	Yes	Part 11.50 – Site Planning	Local	Planning Dept.
<p><i>How does this reduce risk?</i></p> <p>This ordinance provides guidance on building setbacks, parking setbacks, landscaping, patios, storage areas, and maintenance which take into account hazard areas and spacing.</p>				
Stormwater Management Ordinance	Yes	Part 11.93 – Stormwater Mng.	Local	Engineering
<p><i>How does this reduce risk?</i></p> <p>The Stormwater Runoff Policy requires that land uses and developments which increase the runoff rate or volume shall control the discharge rate of runoff prior to its release to off-site land. The purposes of this policy are to:</p> <p>(1) Permit development without increasing the flooding potential of other lands;</p> <p>(2) Reduce damage to receiving streams and impairment of their capacity which may be caused by increases in the quantity and rate of stormwater discharge; and</p> <p>(3) Establish a basis for design of stormwater drainage systems on lands below undeveloped areas which shall preserve the rights and options of both dominant and servient property owners and assure long-term adequacy of storm drainage systems.</p>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 1191- 6/21/1994	Local	Planning Dept.
<i>How does this reduce risk?</i> It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (a) Protect human life and health; (b) Minimize expenditure of public money for costly flood control projects; (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (d) Minimize prolonged business interruptions; (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; and (f) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes			
<i>How does this reduce risk?</i>				
Capital Improvement Plan	Yes	August 2023	Local	Various
<i>How does this reduce risk?</i> Operates as a roadmap that will prioritize and guide the investment of Issue 12 dollars for both short-term and long-term capital needs (such as streets, bridges, trails, sidewalks, playgrounds, parks and more).				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Habitat Conservation Plan <i>How does this reduce risk?</i>	No	-	-	-
Economic Development Plan <i>How does this reduce risk?</i>	-	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	-	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	-	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	-	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	-	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	Draft	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	Yes	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i> The Emergency Operations Plan was adopted by Ordinance 0254-2001 on December 17, 2001. In accordance with the recommendation of the Director of Emergency Management, this Plan shall be updated each year and kept current at all times.	Yes	December 17, 2001	Local	Emergency Management
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Gahanna to oversee and track development.

Table 9.11-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Planning & Engineering
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	There is a specific Flood Permit for all development within these areas.
Do you have a buildable land inventory? • If yes, please describe	No	Gahanna is largely built-out but does have infill opportunities.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Gahanna and their current responsibilities that contribute to hazard mitigation.

Table 9.11-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Planning Commission is comprised of seven members appointed to three-year terms by City Council or the Mayor.
Zoning Board of Adjustment	Yes	<p>The Board of Zoning and Building Appeals shall have the power to hear and decide appeals as follows:</p> <ul style="list-style-type: none"> For exceptions to ordinances, resolutions, and regulations of the City pertaining to zoning, building, and landscaping in the City. From the decisions, measures and orders of City officials, boards, commissions and agencies pertaining to zoning, building, and landscaping in the City. The Board shall decide its cases to afford justice and avoid unreasonable hardship to citizens. Further, the Board's authority shall be exercised

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		subject to such reasonable standards as shall be prescribed by Council. Further, the Board shall have such other powers as may be granted to it by Council
Planning Department	Yes	<p>The Planning Commission shall have the power and duty to:</p> <ul style="list-style-type: none"> Advise the Council concerning the preparation of plans and maps for the future physical development and harmonious improvement of the Municipality. Evaluate the planning and design, location, removal, relocation and alteration of new, renovated, or expanded structures; any public building or structure and public property; the location, widening, extension and vacation of streets, alleys, public ways, parks, playgrounds, recreation areas and other public places. Approve plats for the subdivision of lands. Regulate and restrict the location of buildings and other structures and of premises to be used for trade, industry, residence, or other specified uses. Regulate and limit heights of buildings or other location of buildings or other structures to be erected or altered. Regulate the bulk and location of buildings and other structures to be erected or altered, including the percentage of lot occupancy, set back building lines, and the area of yards, courts and other open spaces; and such other powers and duties as may be imposed upon it by resolution or ordinance of Council
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	The Mission of the Department of Parks & Recreation is to provide parks, trails, and recreational opportunities to all people of Gahanna so they can be healthy and well while they explore and learn in our community.
Economic Development Commission/Committee	Yes	-
Public Works/Highway Department	Yes	-
Construction/Building/Code Enforcement Department	Yes	-
Emergency Management/Public Safety Department	Yes	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	From Franklin Count EMA
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stormwater Management program
Mutual aid agreements	Yes	-
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Planners or engineers with an understanding of natural hazards	Yes	-
Staff with expertise or training in benefit/cost analysis	Yes	-
Professionals trained in conducting damage assessments	Yes	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Utilities Engineer

Fiscal Capability

The table below summarizes financial resources available to the City of Gahanna.

Table 9.11-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Gahanna.

Table 9.11-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	-
Personnel skilled or trained in website development	Yes	-
Hazard mitigation information available on your website	No	Will implement in the future.
Social media for hazard mitigation education and outreach	No	Will implement in the future.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Through Franklin County EMA

Outreach Resources	Available? (Yes/No)	Comment:
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Gahanna.

Table 9.11-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.11-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.11.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Gahanna.

Table 9.11-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Gahanna (C)	48	29	\$88,329.77	2	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Gahanna.

Table 9.11-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Our GIS is fully integrated with the current FEMA Flood mapping for the entire City of Gahanna and beyond. Properties damaged by flooding would be inventoried as part of the permitting process.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	-
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Damage determinations are made in coordination with the Chief Building Official and Fire Marshal.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	-
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Planning & Engineering

NFIP Topic	Comments
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Yes – We are in the process of having additional staff trained.
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit Review, GIS, inspection, engineering
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	By code
What are the barriers to running an effective NFIP program in the community, if any?	Cost
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Chapter 1191-6/21/1994
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meet
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Site Plan Review supports floodplain management
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	-

9.11.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.11-11. Number of Building Permits for New Construction Since the Previous HMP

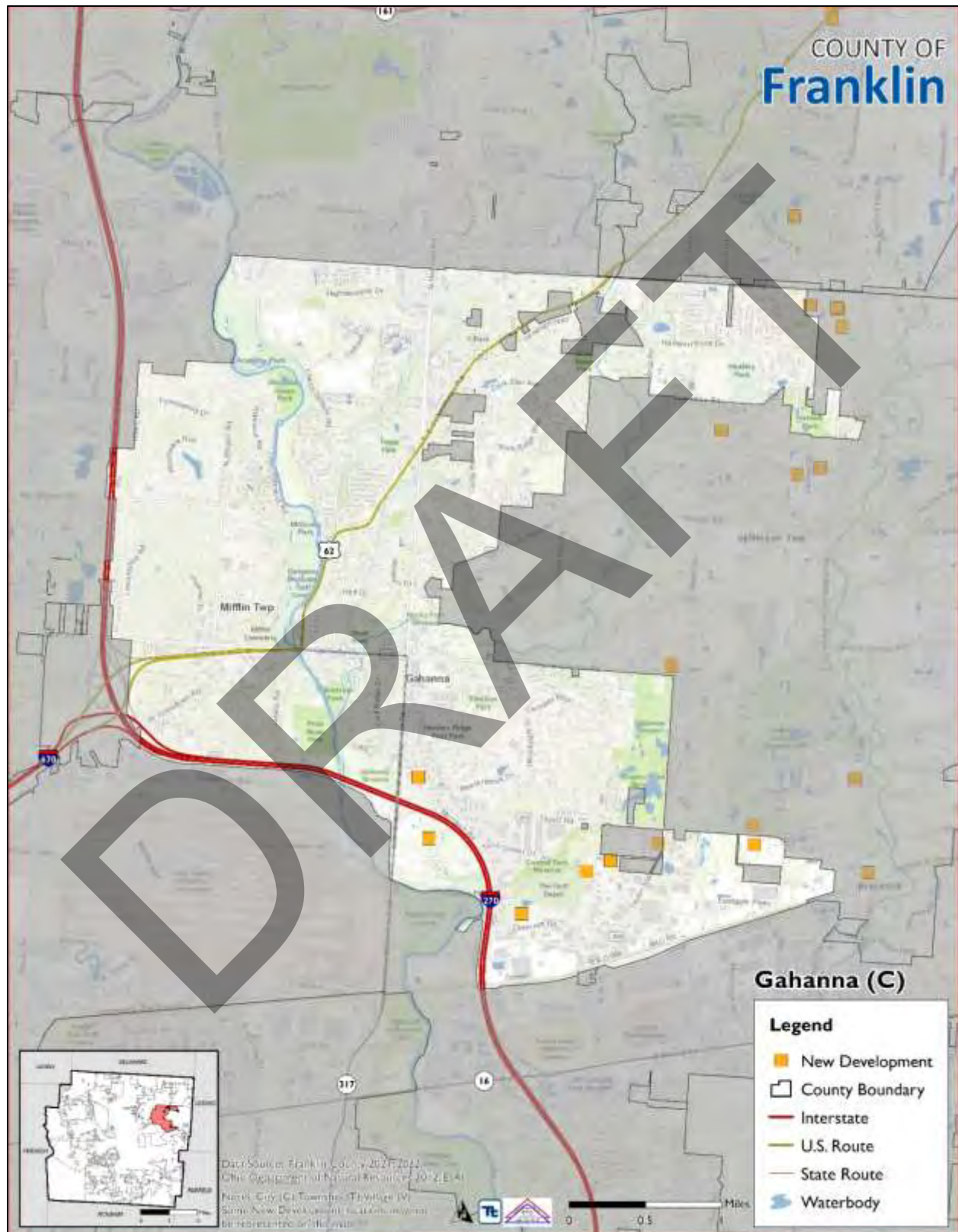
Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	81	2	68	2	95	1	54	1	36	2
Multi-Family	2	0	0	1	1	0	0	0	4	0
Other (commercial, mixed-use, etc.)	16	0	17	1	14	2	14	4	21	5
Total Permits Issued	99	2	85	4	110	3	68	5	61	7

Table 9.11-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

DRAFT

Figure 9.11-1. City of Gahanna Hazard Area Extent and Location Map – New Development



9.11.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Gahanna's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Gahanna has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.11-2. City of Gahanna Hazard Area Extent and Location Map - Flood

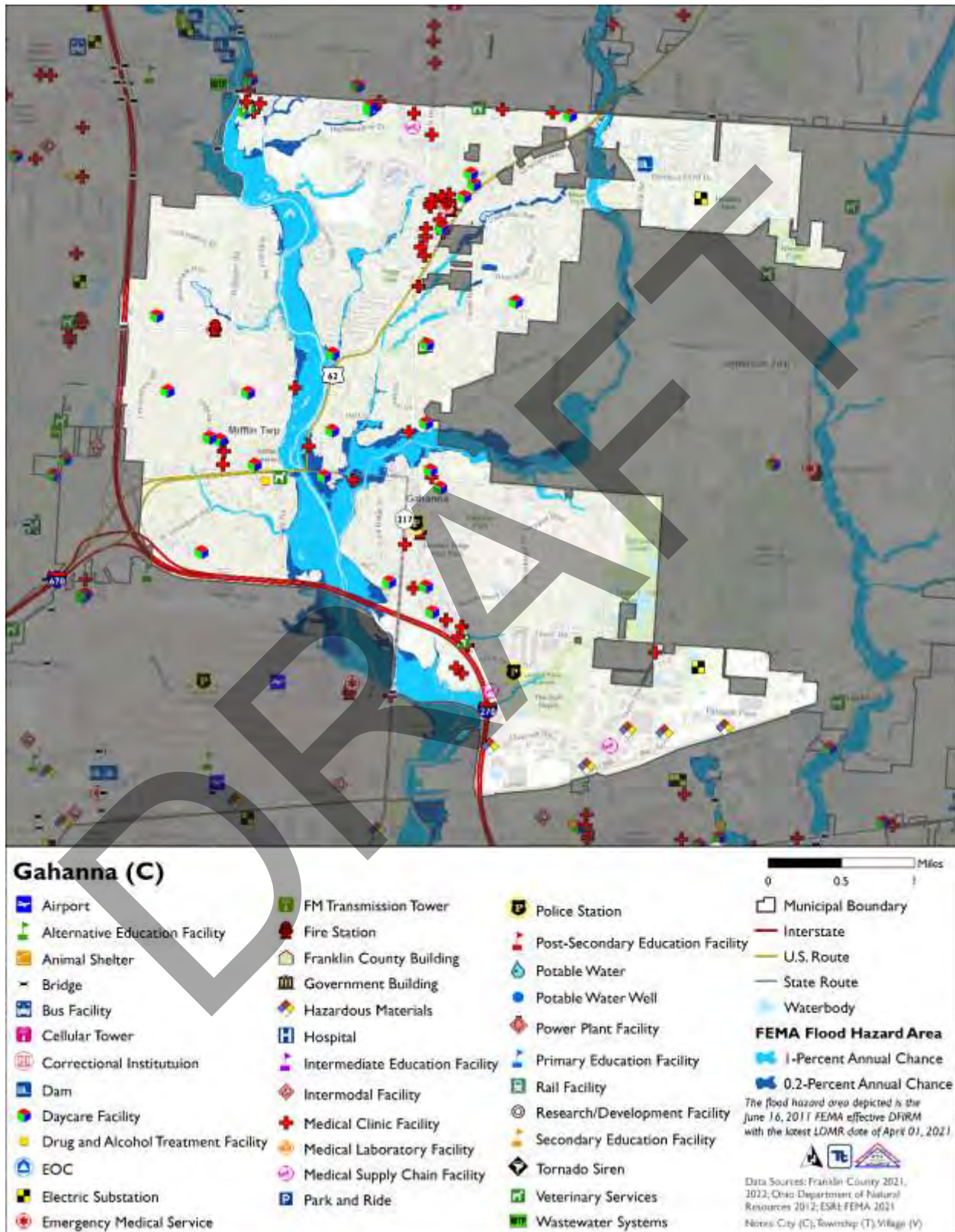


Figure 9.11-3. City of Gahanna Hazard Area Extent and Location Map – Inland Erosion

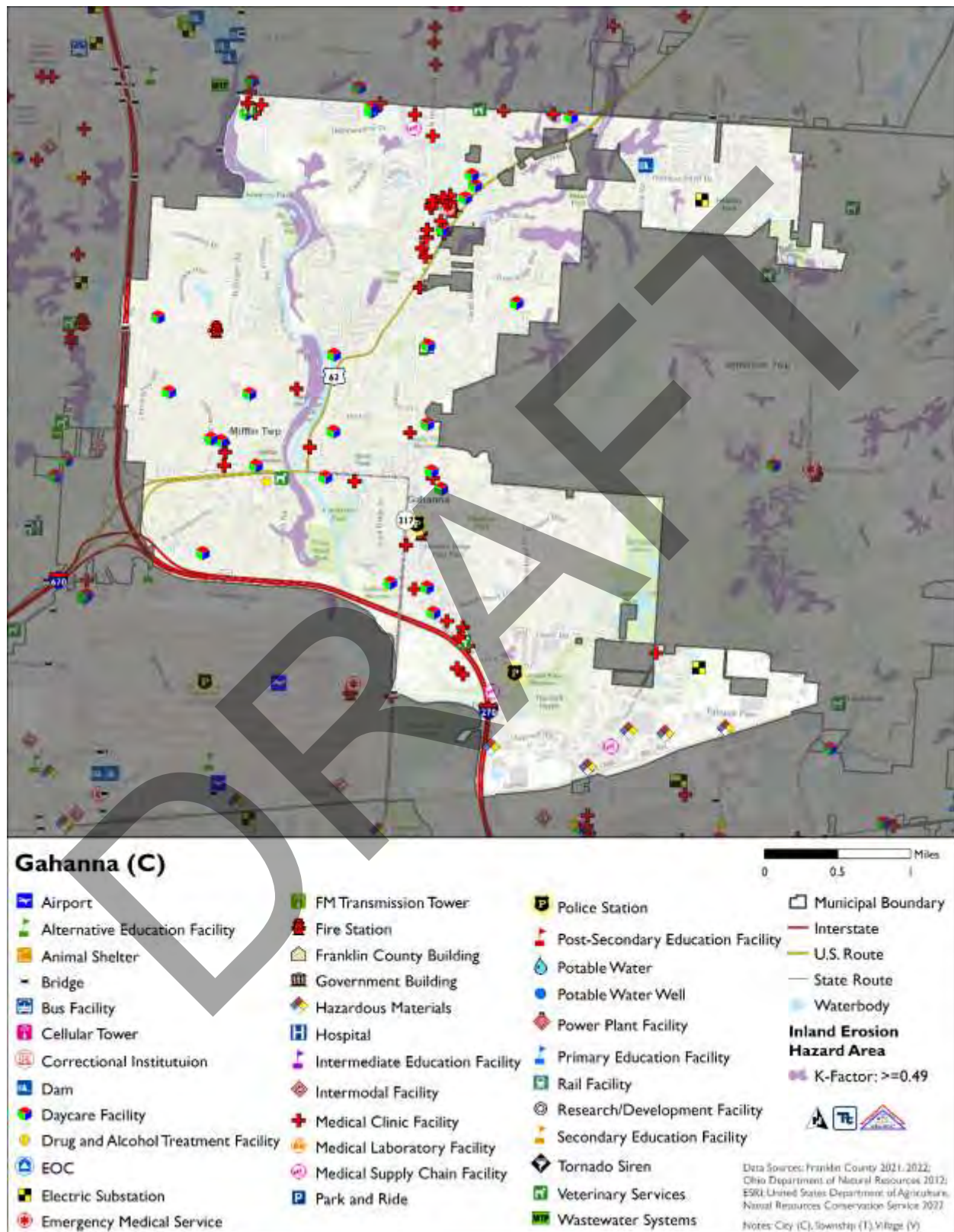
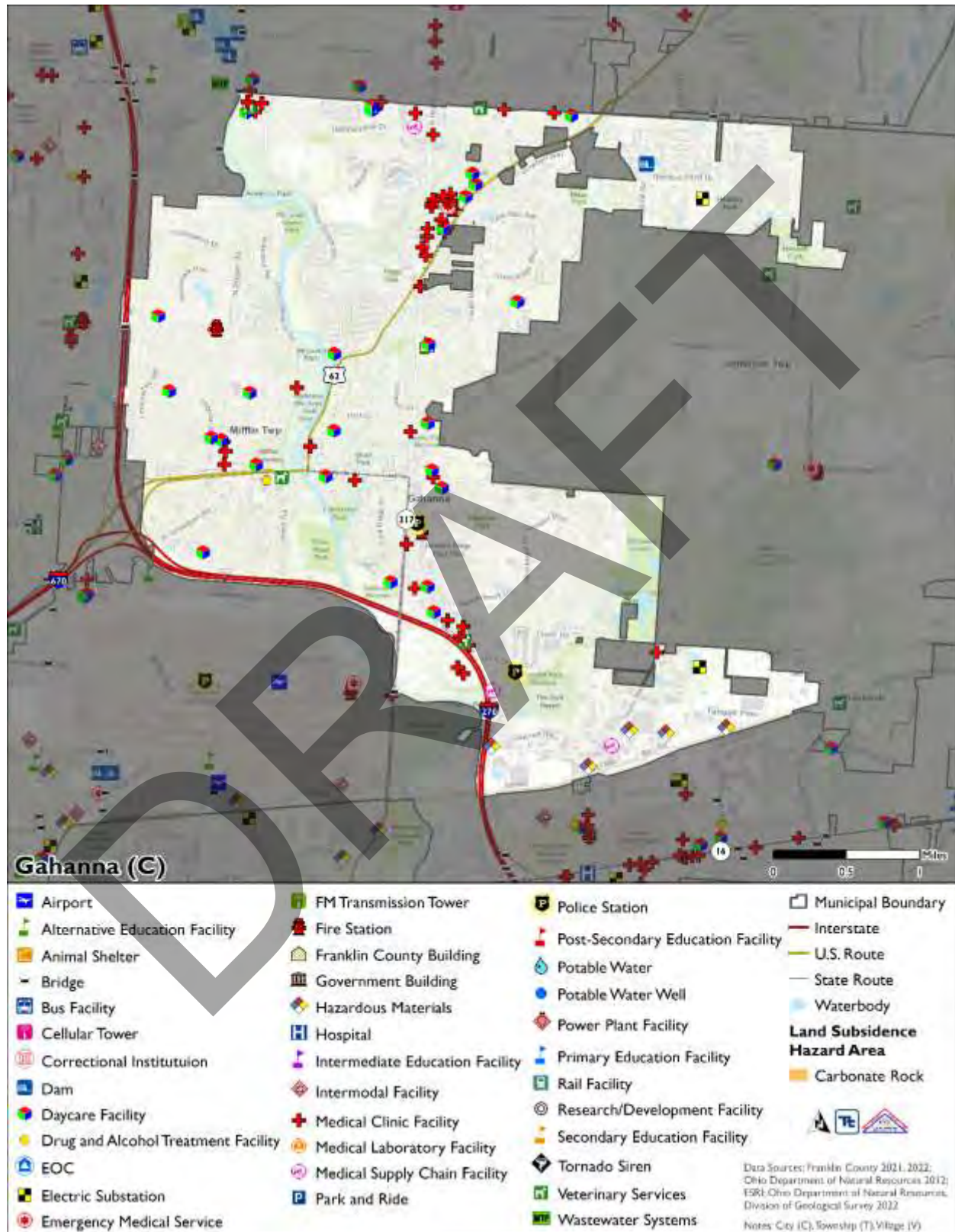


Figure 9.11-4. City of Gahanna Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Gahanna's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Gahanna experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.11-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Gahanna.

The City of Gahanna reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.11-14. Hazard Ranking Input

Hazard/Vulnerability	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.11-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Gahanna

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	3	3
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

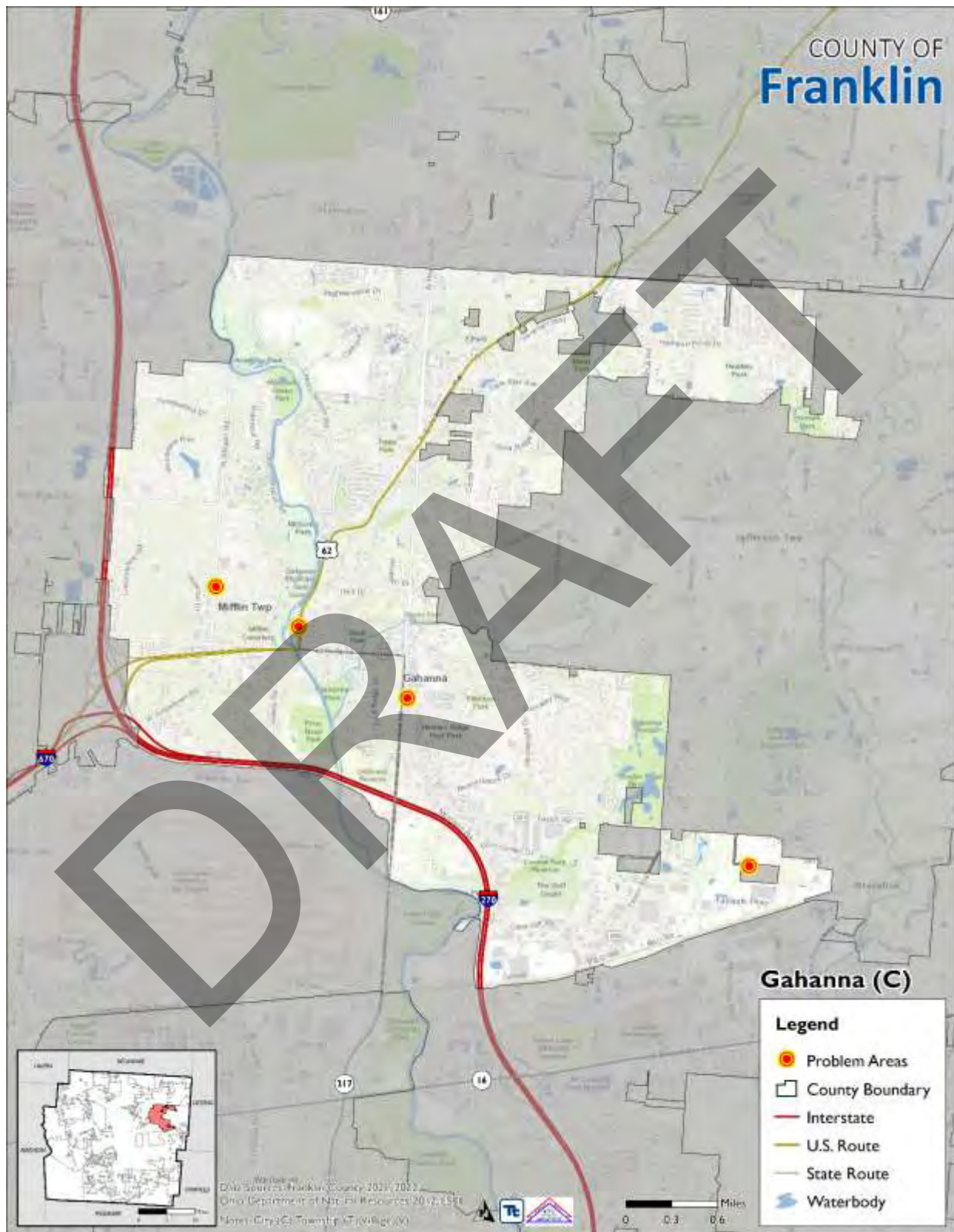
Identified Issues

In addition to the risk assessment, the City of Gahanna identified the following vulnerabilities within its community:

- Outdated zoning code and regulations
- Flooding is a problem as the City sits immediately south of the Hoover Dam and the main outfall of Big Walnut Creek bisects the City.
- Flooding due to drainage issues.

The following figure illustrates the problem areas identified by the City during the planning process.

Figure 9.11-5. City of Gahanna Hazard Area Extent and Location Map – Problem Areas



9.11.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.11-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Storm water five year capital projects (3,000,000 / 3 years)	Mayor's Office	-	-	-	-
Flood routing swale for Academy Woods. (750,000 / 2 years)	Mayor's Office	-	-	-	-
Detention basin, flood routing swales and culverts for Industrial Zone phase 1. (450,000 / 1 year)	Mayor's Office	-	-	-	-
Industrial Zone phase 2, pond dredging retention basins. (1,000,000 / 9 months)	Mayor's Office	-	-	-	--
Engineering of flood mitigation program. (150,000 / 6 months)	Mayor's Office	-	-	-	-
Industrial Zone 36" pipe for Kahiki (450,000 / 9 months)	Mayor's Office	-	-	-	-
Construction of flood reliever piping system. (850,000 / 2 years)	Mayor's Office	-	-	-	-
Royal Manor BW phase 1 & 2 construction. (1,500,000 / 18 months)	Mayor's Office	-	-	-	-
Old Gahanna storm rehab, (3,000,000 / 2 years)	Mayor's Office	-	-	-	-
Storm component of East Johnstown Road (1,500,000 / 18 months)	Mayor's Office	-	-	-	-
Hunters Ridge/Claman Heights Storm Improvements (200,000/2 years)	Mayor's Office	-	-	-	-
Royal Manor/Brentwood Storm Improvements (5,500,000/3 years)	Mayor's Office	-	-	-	-
Souder Ditch Watershed – Erosion Repair Projects (\$1,500,000/18 months)	Mayor's Office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Gahanna identified the following mitigation efforts completed since the last HMP:

- None identified.

Since the adoption of the County's first HMP, the City of Gahanna has made significant mitigation progress in the following areas:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Gahanna participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.11-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee		X		X	X					X
Disease Outbreak		X		X	X					X
Drought		X		X	X					X
Earthquake		X		X	X					X
Extreme Temp		X	X	X	X					X
Flood		X	X	X	X				X	X
Geologic		X	X	X	X					X
Invasive Species	X			X	X	X				
Severe Summer Weather		X		X	X				X	X
Severe Winter Weather		X		X	X				X	X
Tornado		X		X	X					X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.11-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Gahanna will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.11-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Gahanna-001	Inundation Modeling	<p>Problem: The City of Gahanna has a number of areas that fall within the mapped FEMA Flood plain and floodway. The City also sits immediately south of the Hoover Dam and the main outfall of Big Walnut Creek bisects the City. In addition, drainage issues exist throughout the City. In events of above average rainfall some of these areas experience significant levels of inundation. In the event of extreme flooding, dam failure, severe storms these areas jurisdiction wide become overwhelmed.</p> <p>Solution: The City will develop an inundation model, city-wide, that will inform officials on nuisance level drainage issues to areas of significant challenges during 25-, 50-, 100-, & 500-year events. This base line information will help identify areas of immediate concern and more thoughtful solutions can be designed to mitigate the impact of these events. This will also provide a trusted resource to better plan response around releases from the Hoover Dam up to and including a dam failure.</p>	Flood; Dam and Levee Failure; Severe Summer Weather; Severe Winter Weather; and Tornado	1,2,3,6	1 Year	City of Gahanna - Engineering Department	FEMA, HMGP, Local	This project will identify the most at risk areas within the City and provide the necessary information for City officials to plan mitigation strategies and projects in future years.	\$100,000	High	LPR	PR
2023-Gahanna-002	Zoning Code Update	<p>Problem: The City's Zoning code was written approximately 50 years ago when the physical environment in the City was dramatically different. The city is mostly built-out by</p>	Flood	1	1 Year	City of Gahanna - Planning Department	Local	Modern Zoning Regulations	\$75,000	High	LPR/NSP	NR, PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<p>today's standards and is not reflective of best practices in today's world. This impacts the natural environment as well as the flood plains and floodways that run through the city. This project will address existing and future land use concerns for these areas.</p> <p>Solution: The entire zoning code for the City of Gahanna will be brought up to today's standards.</p>										

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.11-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Gahanna-001	Inundation Modeling	0	0	1	1	1	1	1	0	0	1	1	1	1	1	10	High
2023-Gahanna-002	Zoning Code Update	0	1	1	0	1	1	1	0	0	0	0	1	1	1	8	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.12 CITY OF GRANDVIEW HEIGHTS

This section presents the jurisdictional annex for the City of Grandview Heights that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Grandview Heights participated in the planning process, an assessment of the City of Grandview Heights' risk and vulnerability, the different capabilities used in the City of Grandview Heights, and an action plan that will be implemented to achieve a more resilient community.

9.12.1 Hazard Mitigation Planning Team

The City of Grandview Heights identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Grandview Heights departments. The City's Administration, Fire, and Service Departments represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.12-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Aubrey Hale/Director of Administration	Name/Title:	James Beckett/ Assistant Fire Chief
Address:	1016 Grandview Avenue, Grandview Heights, Ohio 43212	Address:	1016 Grandview Avenue, Grandview Heights, Ohio 43212
Phone Number:	614-488-3159	Phone Number:	614-488-3159
Email:	ahale@grandviewheights.gov	Email:	jbeckett@grandviewheights.gov
NFIP Floodplain Administrator			
Name/Title:	Bob Mezera, Director of Building & Zoning		
Address:	1260 McKinley Avenue, Columbus, OH 43222		
Phone Number:	(614) 481-6220		
Email:	rmezera@grandviewheights.gov		
Additional Contributors:			
Name/Title:	Darryl Hughes, Service Director		
Method of Participation:	Provided input		

9.12.2 Municipal Profile

The City of Grandview Heights is located in Central Ohio and is a prominent suburb of Columbus. The City is nearly completely surrounded by Columbus, with the exception of the Village of Marble Cliff bordering the City to the West. The City is just north of the Scioto River, west of the Olentangy River, and is in close proximity to Clinton Township.

According to the American Community Survey, the 2021 population for the City of Grandview Heights was 8,099, a 23.91 percent increase from the 2010 Census population of 6,536. Data from the 2021 American Community Survey indicates that 5.7 percent of the population is 5 years of age or younger and 11.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.12.3 Jurisdictional Capability Assessment and Integration

The City of Grandview Heights performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Grandview Heights to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Grandview Heights and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.12-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Building Code; City of Grandview Heights Code Part 13	State of Ohio	Building Department
<i>How does this reduce risk?</i> <i>The Building Code ensures structures are built safely with integrity to prevent injury, collapse, fire, or structural damage.</i>				
Zoning/Land Use Code	Yes	Subdivision Regulations of the City of Grandview Heights, Ohio, Part 11	City	Building Department Director
<i>How does this reduce risk?</i> Each development that comes forward must address stormwater mitigation and design to minimize the impacts to the surrounding environment. The majority of Grandview Heights sits at an elevation out of the floodplain and floodway.				
Subdivision Ordinance	Yes	Subdivision Regulations of the City of Grandview Heights, Ohio, Chapter 1113	City	Building Department Director
<i>How does this reduce risk?</i> Each development that comes forward must address stormwater mitigation and design to minimize the impacts to the surrounding environment. The majority of Grandview Heights sits at an elevation out of the floodplain and floodway.				
Site Plan Ordinance	Yes	Chapter 937	City	Building Department/ Planning Department
<i>How does this reduce risk?</i> Each development that comes forward must address stormwater mitigation and design to minimize the impacts to the surrounding environment. The majority of Grandview Heights sits at an elevation out of the floodplain and floodway.				
Stormwater Management Ordinance	Yes	Stormwater Management Code	City	Building Department Director
<i>The Stormwater Management Code establishes a basis for design and therefore can:</i>				
(1) Minimize the damage and inconvenience of flooding; (2) Provide drainage systems which continue to benefit their tributary area over the long term; (3) Minimize the adverse effects of new drainage systems on existing systems; and (4) Minimize the expense of maintaining the drainage facilities within the City. (5) Protect the water quality of existing water bodies to the maximum extent				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 1339 Flood Damage Prevention	City	Floodplain Administrator (Director of Building & Zoning)
<i>The ordinance minimizes the impact of development on adjacent properties within and near flood prone areas by:</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
(1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities; (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial Construction; (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; (4) Controlling filling, grading, dredging, excavating, and other development which may increase flood damage; and (5) Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards in other areas.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Historical Preservation Ordinance	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	2019 Community Plan	-	-
<i>How does this reduce risk?</i> This plan restricts use of current area subject to flooding to manufacturing and other commercial uses, prohibiting residential.				
Capital Improvement Plan	Yes	Capital Improvement Plan	City	Finance Department
<i>How does this reduce risk?</i> Our CIP reduces risk by allowing us to make necessary infrastructure improvements such as utility upgrades to increase capacity, minimizing negative impacts and personal property damage, and to purchase equipment to mitigate any effects of a hazard.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Chapter 937	City	City Engineer
<i>How does this reduce risk?</i> The Stormwater Management Code establishes a basis for design and therefore can: <ol style="list-style-type: none"> (1) Minimize the damage and inconvenience of flooding; (2) Provide drainage systems which continue to benefit their tributary area over the long term; (3) Minimize the adverse effects of new drainage systems on existing systems; and (4) Minimize the expense of maintaining the drainage facilities within the City. (5) Protect the water quality of existing water bodies to the maximum extent 				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	In Progress	-	-	-
This plan provides financial strategies for improving infrastructure including but not limited to utilities, roadway conditions, and resolve flooding potential along Goodale Boulevard.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	In progress	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	-	-	-
<i>The Emergency Operations Plan allows staff to know their roles and more quickly respond to hazards as they occur, reducing the potential for life and property loss.</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Post-Disaster Recovery Plan	No	-	-	-
How does this reduce risk?				
Public Health Plan	No	-	-	-
How does this reduce risk?				
Other	-	-	-	-
How does this reduce risk?				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Grandview Heights to oversee and track development.

Table 9.12-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	
If you do not issue development permits, what is your process for tracking new development?	N/A	Current zoning process
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	
Do you have a buildable land inventory? • If yes, please describe	No	
Describe the level of build-out in your jurisdiction.	N/A	95%

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Grandview Heights and their current responsibilities that contribute to hazard mitigation.

Table 9.12-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Commission	Yes	Oversees commercial properties, zoning issues, and lot consolidations and splits. Members: <ul style="list-style-type: none"> Jamie Gentry, Chair Frances Rourke Tim Kaskewsky Mark Hollern, AIA, LEED AP Sarah Bongiorno Greta Kearns, Mayor, Ex Officio Anthony Panzera, Council Representative, Ex Officio

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Board of Zoning Appeals	Yes	The Board of Zoning Appeals oversees residential zoning issues, and variances to the Zoning Code. Members <ul style="list-style-type: none"> • Rick Kinsinger, Chair • Anna Kalnow, Vice-Chair • Joe Donovan • Mattijs van Maasakkers • Tyler La Sosa
Planning Department	Yes	Director of Planning & Community Development
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Council Committee
Public Works/Highway Department	Yes	Service Department
Construction/Building/Code Enforcement Department	Yes	The Building and Zoning Department: <ul style="list-style-type: none"> • Issues contractor registrations, permits, and applications • Reviews construction documents • Performs inspections • Enforces Code compliance on new and existing structures • Facilitates the Board of Zoning Appeals (residential projects) • Facilitates the Planning Commission (commercial projects) Director, Administrative Coordinator, two inspectors; Director is floodplain manager
Emergency Management/Public Safety Department	Yes	Police & Fire Department
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	Rely on FCEMHS
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Completed through a contract executed by Parks Maintenance staff
Mutual aid agreements	Yes	City of Columbus, Clinton Township, Upper Arlington
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	Yes	The Board of Health will assist, to the extent requested, Franklin County Public Health in protecting the health of the community from disease and injury by considering and recommending needed services, advising the Mayor and Chief of Fire about health concerns that are not covered by the relationship with the County, and encouraging local partnerships that promote a healthy lifestyle for persons of all ages.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	City Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	City Engineer / Building Department staff
Planners or engineers with an understanding of natural hazards	Yes	City Engineer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Contract staff

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	Yes	City Engineer
Emergency Manager	Yes	Fire Chief/Police Chief
Grant writer(s)	No	Consider the following: Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Contract Engineer

Fiscal Capability

The table below summarizes financial resources available to the City of Grandview Heights.

Table 9.12-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Grandview Heights.

Table 9.12-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Handled by the City's Administration
Personnel skilled or trained in website development	No	
Hazard mitigation information available on your website	Yes	Floodplain information is available under the Building Department
Social media for hazard mitigation education and outreach	Yes	Handled through current communication channels
Citizen boards or commissions that address issues related to hazard mitigation	No	-

Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	Yes	We have a 311 system with push alerts and email notification capabilities
Natural disaster/safety programs in place for schools	Yes	Police & Fire oversee
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	We utilize social media platforms and through those, share information from Franklin County Emergency Management when appropriate and applicable.

Community Classifications

The table below summarizes classifications for community programs available to the City of Grandview Heights.

Table 9.12-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	November 1, 2018
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.12-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.12.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Grandview Heights.

Table 9.12-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Grandview Heights (C)	9	3	\$29,877.05	NR	NR

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of the NFIP program in the City of Grandview Heights.

Table 9.12-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	The southernmost portion of Grandview Heights is within FEMA's floodplain. We are positioned between two rivers (Scioto and Olentangy), increasing our chance of being impacted by a serious flood.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No.
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No.
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	We have not had a flood event in recent years during current staff's time. We do occasionally experience water in basements during heavy rain events.

NFIP Topic	Comments
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	None.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes.
NFIP Compliance	
What local department is responsible for floodplain management?	Building & Zoning
Are any certified floodplain managers on staff in your jurisdiction?	Not currently.
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes through regional partners.
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Yes. We need to get a member staff certified as the Floodplain Manager.
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Building permit review, inspections, and engineering review
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Exceeds 50% of market value
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Chapter 1339 of Codified Ordinances; 2005
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets minimum requirements
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Floodplain review comments and concerns are provided as part of the development process.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.12.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.12-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	10	0	36	0	37	0	2	0	35	0
Multi-Family	0	0	18	0	20	0	1	0	2	0
Other (commercial, mixed-use, etc.)	1	0	5	0	5	0	3	0	4	0
Total Permits Issued	11	0	59	0	62	0	6	0	41	0

Table 9.12-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Grandview Yard (Morrison Bldg)	Mixed Used	132 units / 1 structure	822 Williams Avenue	N/A	In progress
Grandview Yard (Manchester Bldg)	Mixed Used	123 units / 1 structure	825 Junction Way	N/A	Completed
Grandview Yard (Homes At Pullman)	Comm - Condos	10 units / 2 structures	907 – 915 Williams Avenue	N/A	Completed
Grandview Yard	Commercial	1 structure	1125 Yard Street	N/A	Completed
Grandview Yard (Block D – Bldg. B)	Commercial	142 units / 1 structure	880 Yard Street	N/A	Completed
Grandview Yard (Parking Garage)	Commercial	1 structure	1125 Rail Street	N/A	Completed
Grandview Yard (Parking Garage)	Commercial	1 structure	975 Rail Street	N/A	Completed
Grandview Yard (Parking Garage)	Commercial	1 structure	960 Bobcat Avenue	N/A	Completed
Grandview Yard (Block D – Bldg. A)	Commercial	78 units / 1 structure	810 Burr Avenue	N/A	Completed
Grandview Yard (NRI)	Commercial	4 structures	1000 – 1050 Yard Street	N/A	Completed
Grandview Yard (Goodard School)	Commercial	1 structure	1175 Bobcat Avenue	N/A	Completed
Grandview Yard (Dorchester East)	Commercial	86 units / 1 structure	950 Dorchester Way	N/A	Completed
Grandview Yard (Dorchester West)	Commercial	150 units / 1 structure	955 Dorchester Way	N/A	Completed
Grandview Yard (Homes At Pullman)	Comm - Condos	4 units / 1 structure	882 – 888 Burr Avenue	N/A	Completed
Grandview Yard (Homes At Pullman)	Comm - Condos	16 units / 4 structures	844 – 876 Pullman Way	N/A	Completed
Grandview Yard (M/I Homes)	Residential	19 single family homes	841 – 877 Pullman Way	N/A	Completed
Grandview Yard (Homes At Pullman)	Comm - Condos	34 units / 7 structures	930 – 994 Pullman Place	N/A	Completed
Grandview Yard (M/I Homes)	Residential	20 single family homes	921 – 959 Pullman Place	N/A	Completed
Grandview Yard (M/I Homes)	Residential	27 single family homes	934 – 968 Hudson Crossing	N/A	Completed
Grandview Yard (M/I Homes)	Residential	32 single family homes	928 – 969 W. First Avenue	N/A	Completed
Grandview Yard (M/I Homes)	Residential	15 single family homes	1074 – 1168 Edgehill Road	N/A	Completed

Grandview Yard (M/I Homes)	Residential	12 single family homes	1091 – 1167 Bobcat Avenue	N/A	Completed
Grandview Yard (Bobcat Apt's)	Commercial	20 units / 3 structures	735 – 789 Bobcat Avenue	N/A	Completed
Grandview Yard	Commercial	35 units / 1 structure	828 Bobcat Avenue	N/A	Completed
Southern Station (Tri-W)	Commercial	265 Units / 1 structure	826 Bowman Way	N/A	Completed
Grandview Yard	Commercial	1 structure	950 W. Goodale Blvd	N/A	Completed
Grandview Crossing	Commercial	2 structures	1056 – 1076 Dublin Road	N/A	In progress
Sheetz Store	Commercial	1 structure	744 Grandview Avenue	N/A	Completed
5 Story Mixed Use Bldg	Commercial	1 structure	1123 W. Goodale Blvd.	N/A	Completed
AEP Storage Facility	Commercial	1 structure	1291 W. Goodale Blvd.	N/A	Completed
GVH Pool Facility	Commercial	2 Structures	1350 W. Goodale Blvd.	N/A	Completed
The Edington Bldg.	Mixed Use	18 units / 1 structure	1580 W. First Avenue	N/A	In progress
Known or Anticipated Major Development in the Next Five (5) Years					
City of Grandview Heights Municipal Building	Commercial	1	1525 Goodale Boulevard	N/A	In design
Grandview Crossing	Commercial	Unknown at this time	Unknown at this time	N/A	N/A
Grandview Yard	Commercial	133 units / 1 structure	875 W. First Avenue	N/A	In plan review

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

COUNTY OF
Franklin

Grandview Heights (C)

Legend

- New Development
- County Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

DRAFT

Map of Grandview Heights (C) showing new development locations. The map includes a legend for New Development (orange squares), County Boundary (black line), Interstate (red line), U.S. Route (yellow line), State Route (blue line), and Waterbody (blue area). A large 'DRAFT' watermark is overlaid on the map. An inset map shows the location of Grandview Heights within Franklin County. The map is titled 'COUNTY OF Franklin' and 'Grandview Heights (C)'.

9.12.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Grandview Heights's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Grandview Heights has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.12-2. City of Grandview Heights Hazard Area Extent and Location Map-Flood

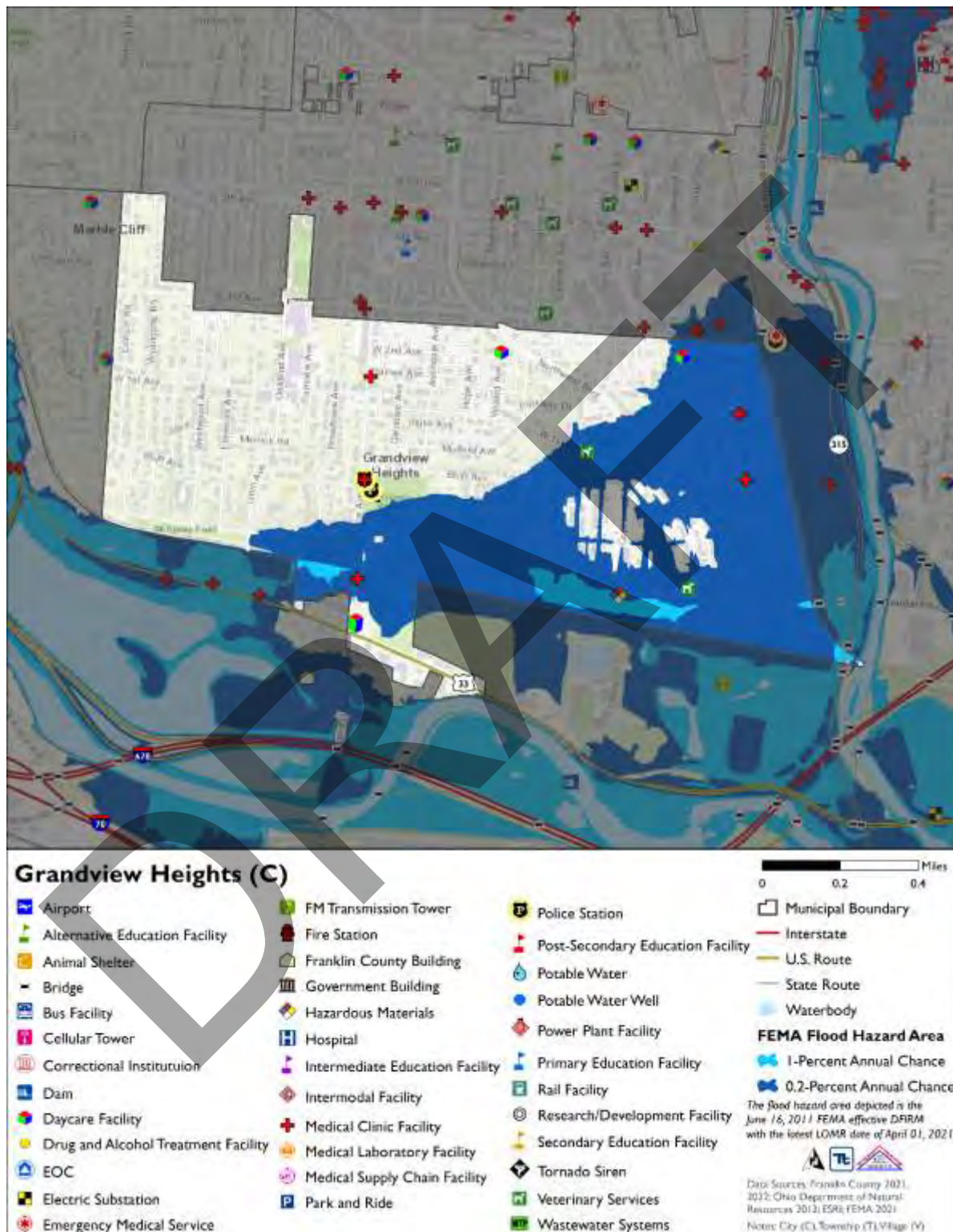


Figure 9.12-3. City of Grandview Heights Hazard Area Extent and Location Map-Inland Erosion

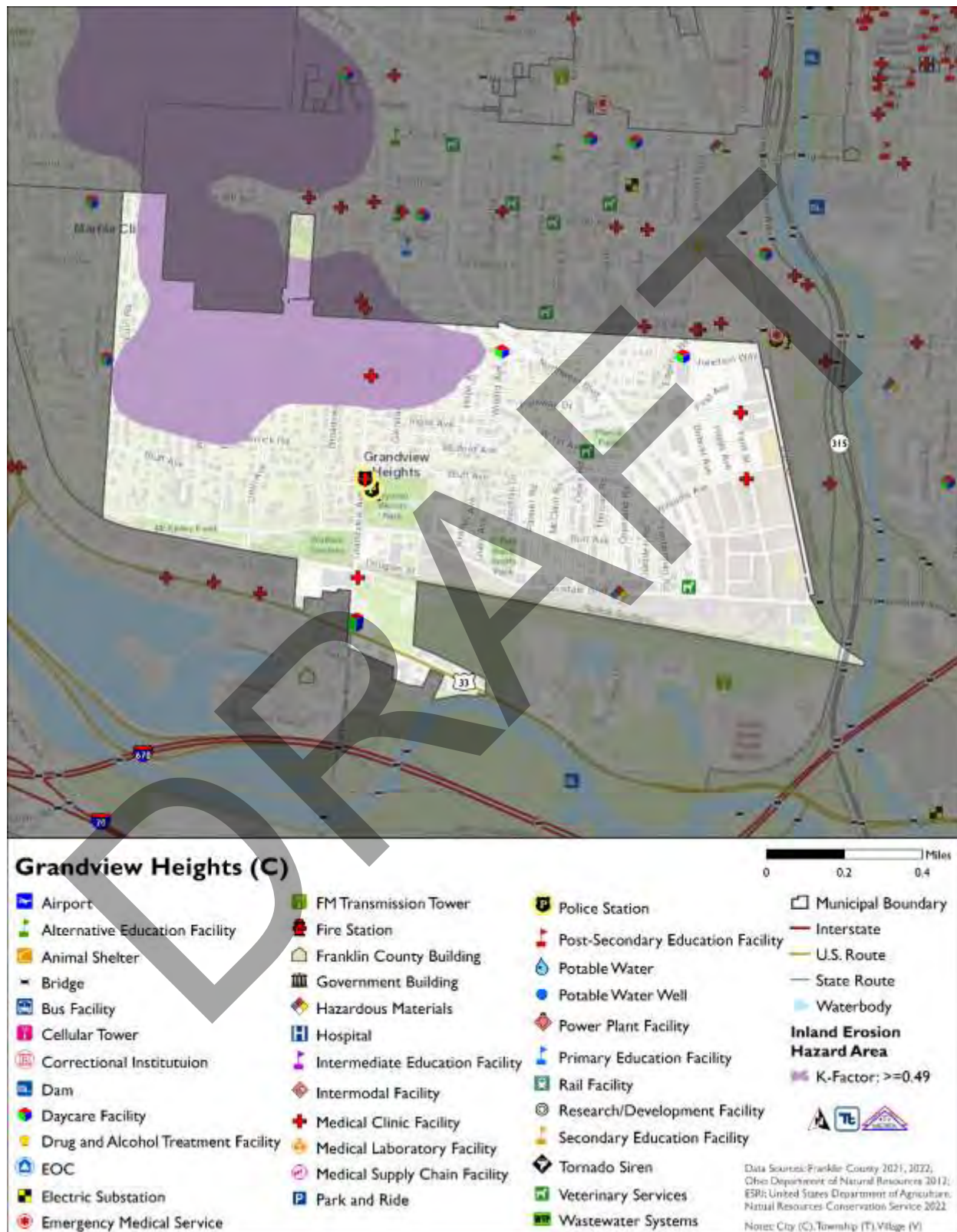
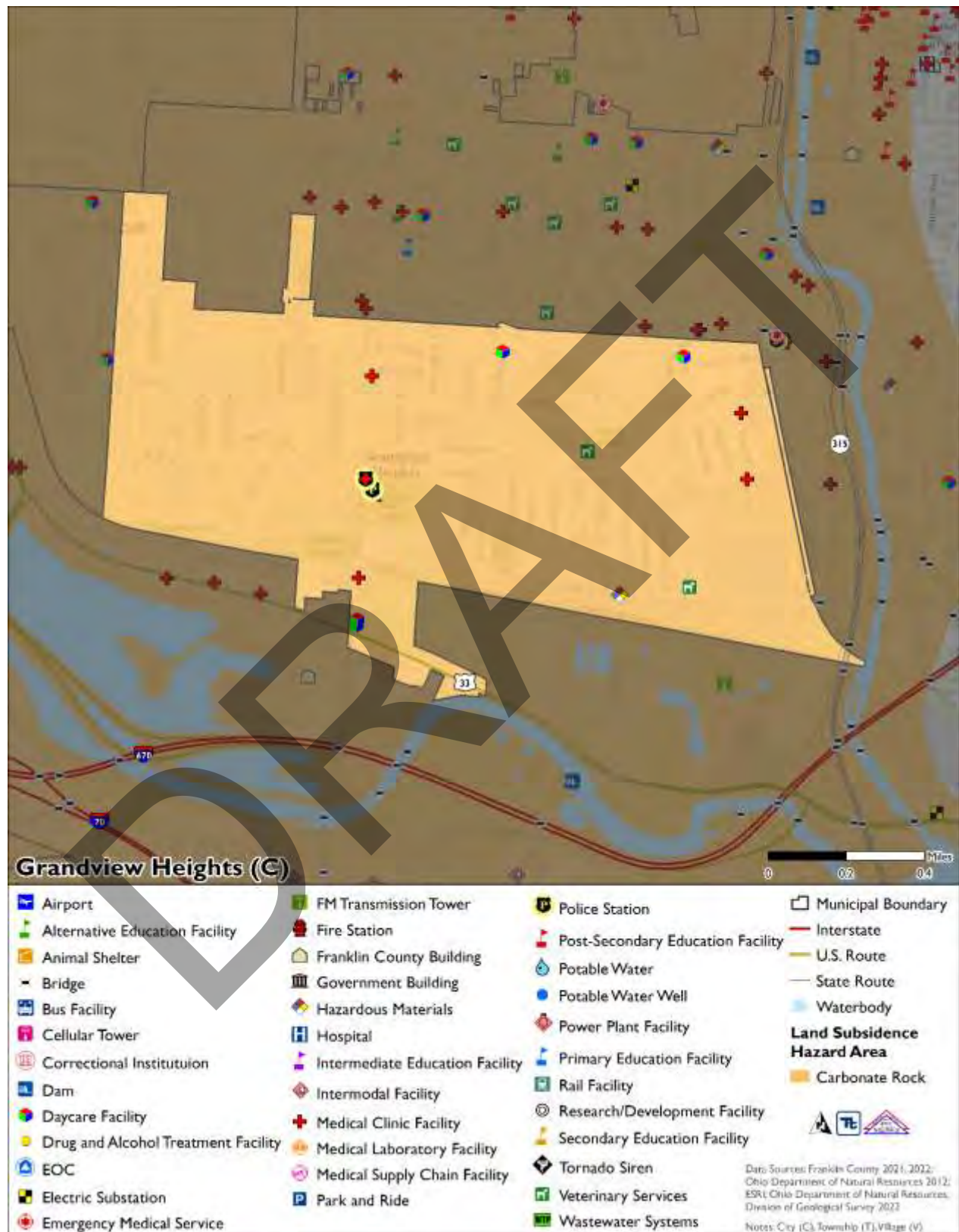


Figure 9.12-4. City of Grandview Heights Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Grandview Height's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Grandview Heights experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.12-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The City of Grandview Heights did not incur any damages or losses from this event.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City of Grandview Heights did not incur any damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City of Grandview Heights did not incur any damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City suffered losses both directly and indirectly due to the COVID-19 Pandemic. Overtime due to necessary platooning and sick leave from COVID exposure was paid out as well as personal protective equipment was purchased to keep employees safe. Income tax revenue from individuals no longer working in their offices was lost, up to \$1.4 million to date.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Grandview Heights. The City of Grandview Heights reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Grandview Heights indicated the following:

- The City changed flood from medium to low since the City does not frequently encounter damage due to flooding.

Table 9.12-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Low
Geologic (Erosion)	Low
Geologic (Land Subsidence)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.12-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Grandview Heights

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	9	8

	Critical Facilities	Lifelines
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	1	1
Subsidence (Karst/Carbonate Rock) Hazard Area	17	13
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	9	8

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Grandview Heights identified the following vulnerabilities within its community:

- The City experiences frequent flooding from storm sewers that flood nearly 10 acres of property and structures during intense precipitation events.
- Intense storms, temperature events and other natural hazards of concern lead to power and utility interruption within the City. This makes it difficult for the City to be able to carry out continuity of operations with limited to no use of utilities.
- During heavy rain events, the City sanitary sewer system reaches capacity quickly. When it reaches capacity quickly, it backs up into many residential structures east of Grandview Avenue south of Third Avenue.
- The City has experienced numerous staffing changes and the new staff/elected officials should be onboarded regarding our all-hazards approach and response.
- The City experiences flooding relating to a storm sewer which repeatedly floods nearly ten acres of property during extreme precipitation events.

COUNTY OF
Franklin

Grandview Heights (C)

Legend

- Problem Areas
- County Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

0 0.1 0.2 Miles

DATA SOURCES: Franklin County GIS 2011-2021
Ohio Department of Natural Resources (2021/2022)
Notes: Exp. City Township Village CV

9.12.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and previously are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.12-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Install a gate valve at the outlet of a storm sewer to remove approximately 10 acres of property from the 100 year flood plain.	Service Department	No Progress	Yes	Install a gate valve at the outlet of a storm sewer to remove approximately 10 acres of property from the 100-year flood plain.	Service Department

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Grandview Heights identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Grandview Heights has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Grandview Heights participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.12-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	X	-	X	X	-	-	-	-	X
Disease Outbreak	-	X	-	X	X	-	-	-	-	X
Drought	-	X	-	X	X	-	-	-	-	X
Earthquake	-	X	-	X	X	-	-	-	-	X
Extreme Temp	-	X	X	X	X	-	-	-	-	X
Flood	-	X	X	X	X	-	-	-	X	X
Geologic	-	X	X	X	X	-	-	-	-	X
Invasive Species	X	-	-	X	X	X	-	-	-	-
Severe Summer Weather	-	X	-	X	X	-	-	-	X	X
Severe Winter Weather	-	X	-	X	X	-	-	-	X	X
Tornado	-	X	-	X	X	-	-	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.12-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Grandview Heights will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.12-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Grandview Heights-001	Gate Valve Installation	<p>Problem: The City experiences frequent flooding from storm sewers that flood nearly 10 acres of property and structures during intense precipitation events.</p> <p>Solution: The City will install a gate valve at the outlet of storm sewers to remove approximately 10 acres of property from the 100-year flood plain.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	1 Year	Mayor's Office, City Engineer	BRIC, FMA, HMGP	Flooding will be significantly reduced.	High	High	SIP	SP
2023-Grandview Heights-002	Bury Utility lines*	<p>Problem: Intense storms, temperature events and other natural hazards of concern lead to power and utility interruption within the City. This makes it difficult for the City to be able to carry out continuity of operations with limited to no use of utilities.</p> <p>Solution: The City will conduct an engineering study to determine what utility lines can be safely moved underground. Once the study is complete, the City will acquire the funding to implement the solutions.</p>	Dam/Levee, Drought, Disease Outbreak, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	6	5 Years	City Engineer	BRIC, HMGP	Critical facilities will be able to operate during intense hazard events.	> \$5,000 for engineering study	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Grandview Heights-003	Sewer System Study	<p>Problem: During heavy rain events, the City sanitary sewer system reaches capacity quickly. When it reaches capacity quickly, it backs up into many residential structures east of Grandview Avenue south of Third Avenue.</p> <p>Solution: The City will conduct an engineering study to figure out how to best improve the sewer system to reduce flooding issues. The City will implement the most cost-effective solution.</p>	Flood	6	1 Year	City Engineer, Public Works	FMA, HMGP, BRIC	Flooding issues will be reduced in the area.	TBD after Engineering Study	High	SIP	SP
2023-Grandview Heights-004	Administration and Public Education	<p>Problem: The City has experienced numerous staffing changes and the new staff/elected officials should be onboarded regarding our all-hazards approach and response.</p> <p>Solution: The City will implement a tabletop exercise to assist City administration greatly in mitigating our response to the hazards of concern. The City plans to educate both the public and their staff on the hazards and how to be prepared. The City will conduct additional public education through existing platforms (website/social media).</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	2 Years	City Administration, City Division of Fire	HMGP, City Budget	The City staff and residents will become more educated on the hazards of concern.	\$1,000	High	EAP	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Grandview Heights-005	Install a gate valve at the outlet of a storm sewer	<p>Problem: The City experiences flooding relating to a storm sewer which repeatedly floods nearly ten acres of property during extreme precipitation events.</p> <p>Solution: The City will install a gate valve at the outlet of the storm sewer to limit flooding issues.</p>	Flood, Severe Summer Weather, Severe Winter Weather	1, 6	Less than 5 years	City Administration	City Budget, FMA, HMGP, BRIC	The City will experience reduced flooding	>\$50,000	High	SIP	PR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.12-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Grandview Heights-001	Gate Valve Installation	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Grandview Heights-002	Bury Utility lines*	1	1	0	1	1	1	1	0	1	1	1	1	1	1	12	High
2023-Grandview Heights-003	Sewer System Study	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2023-Grandview Heights-004	Administration and Public Education	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Grandview Heights-005	Install a gate valve at the outlet of a storm sewer	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.13 GROVE CITY

This section presents the jurisdictional annex for Grove City that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Grove City participated in the planning process, an assessment of Grove City's risk and vulnerability, the different capabilities used in Grove City, and an action plan that will be implemented to achieve a more resilient community.

9.13.1 Hazard Mitigation Planning Team

The City of Grove City identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Grove City departments, including the Administration and Safety Department. The City Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.13-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Charles W. Boso, Jr./City Administrator	Name/Title:	William F. Vedra, Jr./Deputy City Administrator
Address:	4035 Broadway, Grove City, OH 43123	Address:	4035 Broadway, Grove City, OH 43123
Phone Number:	614-277-3003	Phone Number:	614-277-3000
Email:	cboso@grovecityohio.gov	Email:	wvedra@grovecityohio.gov
NFIP Floodplain Administrator			
Name/Title:	Michael Boso		
Address:	4035 Broadway Grove City, OH 43123		
Phone Number:	614-277-3076		
Email:	mboso@grovecityohio.gov		
Additional Contributors:			
Name/Title:	Kota Wharton/Building Administrative Secretary		
Method of Participation:	Provided key input through the planning process		
Name/Title:	Michael Boso/Chief Building and Zoning Official		
Method of Participation:	Provided key input through the planning process		

9.13.2 Municipal Profile

Grove City is in the southwest area of Franklin County and is bordered by the Village of Urban Crest to the north and surrounded by Jackson Township to the south and west. Columbus City also surrounds Grove City to the north and west.

According to the American Community Survey, the 2021 population for Grove City was 41,025, a 15.32 percent increase from the 2010 Census population of 35,575. Data from the 2021 American Community Survey indicates that 7.4 percent of the population is 5 years of age or younger and 16.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.13.3 Jurisdictional Capability Assessment and Integration

Grove City performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Grove City to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Grove City and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.13-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part 13 and A.C. 4101:1	Local/State	Div. of Building
<i>How does this reduce risk?</i> The Grove City Building Code, in conjunction with the Ohio Building Code and Residential Code and all standards and references, contained therein, provide minimum standards for life, safety and resiliency of the built environments of the City.				
Zoning/Land Use Code	Yes	Part 11/Comp. Plan	Local	Div. of Building
<i>How does this reduce risk?</i> See comprehensive plan.				
Subdivision Ordinance	Yes	Chapter 1101	Local	Planning and Zoning
<i>How does this reduce risk?</i> The criteria and procedures established in this chapter pertain to providing public and/or private streets, sidewalks, parking lots, sewers, driveways, water lines, grading of land, siting of structures and all other site work outside the exterior limits of a structure or structures, including the appurtenances and associated items, all in accordance with the standard drawing requirements stated herein.				
Site Plan Ordinance	Yes	Chapter 1141	Local	Development
<i>How does this reduce risk?</i> Built environments need to be built to local laws and ordinances and need to be built to meet FEMA floodplain standards. Reviews conducted during planning and plan approval.				
Stormwater Management Ordinance	Yes	Chapter 900	Local	Service
<i>How does this reduce risk?</i> Same as above. Refer to EPA standards.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	Yes	2050 Plan	Local/Regional	GC/MORPC
<i>How does this reduce risk?</i> Plan that aligns with the Regional Growth Plan				
Environmental Protection Ordinance	Yes	Chapter 971	Local	Service
<i>How does this reduce risk?</i> <ul style="list-style-type: none"> Are environmental systems that protect development from hazards are identified and mapped. Environmental policies maintain and restore protective ecosystems. Ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains. Environmental policies provide incentives to development that is located outside protective ecosystems. 				
Flood Damage Prevention Ordinance	Yes	Chapter 1329	Local	Building
<i>How does this reduce risk?</i> Reduces repetitive and predictable losses.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Chapter 509.08	Local	City Administrator
<i>How does this reduce risk?</i> NFPA 1600 all hazards plan.				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Planning Documents				
Comprehensive/Master Plan	Yes	GroveCity2050 Community Plan (2018)	Local	Administration, Development Dept.
<p>How does this reduce risk?</p> <p>The GroveCity2050 Community Plan includes an analysis of land appropriate for future development by identifying environmentally sensitive areas such as wetlands, floodplain, and large tree stands (page 17 of Plan) that are not appropriate for development. The Community Plan contains a Development and Conservation Strategy Map showing areas targeted for development as well as areas intended to be protected as undeveloped open space (page 21 of Plan). This is further conveyed in the Future Land Use and Character Map (page 23 of Plan) that identifies areas for future parks / open space / preservations and areas that should be reserved for "low impact development" (low density residential or conservation neighborhoods, low density non-residential).</p>				
Capital Improvement Plan	Yes	Capital Improvement Plan (annual)	Local	Administration, Service Dept.
<p>How does this reduce risk?</p> <ul style="list-style-type: none"> The Capital Improvement Plan ensures that public infrastructure improvements are made in-line with the Community Plan which encourages responsible development, preserving natural features and in-line with other City policies that are intended to reduce or eliminate potential hazards (stormwater policies, stream corridor protection). A recent example of a project identified on the CIP based on plans related to hazard mitigation and risk reduction is the restoration of Marsh Run in 2022. This project including shoring up the stream's eroded banks, further separating it from the adjacent roadway, and reestablishing native vegetation. 				
Disaster Debris Management Plan	No	-	-	-
How does this reduce risk?				
Floodplain Management or Watershed Plan	Yes	Chapter 1328	Local	Floodplain MGR
<p>How does this reduce risk?</p> <p>Adhere to FEMA Floodplain designations and guidance to prevent building structures in a floodplain.</p>				
Stormwater Management Plan	Yes	Stormwater Design Manual (2022)	Local	Service Dept.
<p>How does this reduce risk?</p> <ul style="list-style-type: none"> The City's Stormwater policies outline stormwater management requirements including peak flow rates, calculation requirements, water quality control criteria, detention system design criteria, and stream corridor protection zone requirements. These policies also regulate operation and maintenance plans for stormwater facilities, and erosion and sediment control requirements. 				
Open Space Plan	Yes	Parks, Recreation and Open Space Master Plan (2021)	Local	Parks and Recreation Dept.
<p>How does this reduce risk?</p> <ul style="list-style-type: none"> Chapter 3 of the Plan is dedicated to Natural Resources and Management, and identifies natural resources throughout that City that should be protected. Threats to natural resources are identified and rates the ecological condition of various waterways in the City. A number of best practices are identified to preserve and protect the area's open spaces and natural resources. 				
Urban Water Management Plan	No	-	-	-
How does this reduce risk?				
Habitat Conservation Plan	No	-	-	-
How does this reduce risk?				
Economic Development Plan	No	-	-	-
How does this reduce risk?				
Shoreline Management Plan	No	-	-	-
How does this reduce risk?				
Community Wildfire Protection Plan	No	-	-	-
How does this reduce risk?				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	Yes	Transportation Chapter of Community Plan	Local	Administration, Development Dept.
<i>How does this reduce risk?</i> <ul style="list-style-type: none"> In addition to identifying future roadway connections and the desired character for existing and future roadways, the Transportation Chapter of the Community Plan includes analyses of connectivity challenges within the City and locations with high vehicular crashes. Plans for future roadways correspond with the Land Use analyses which support development in non-environmentally sensitive areas. 				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	Yes	Grove City Sustainability Plan	Local	Administration, Development Dept., Service Dept.
<i>How does this reduce risk?</i> <ul style="list-style-type: none"> The Sustainability Plan reinforces many of the principles identified in the Community Plan regarding encouraging Low Impact Development practices and removing barriers for Green Infrastructure. 				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	Yes	Town Center Conceptual Framework (2021)	Local	Administration, Development Dept., Service Dept.
<i>How does this reduce risk?</i> <ul style="list-style-type: none"> The Town Center Conceptual Framework is limited in scope to risk reduction and focuses more on the desired character for existing and future development in the Town Center area. 				
Other	-	-	-	-
<i>How does this reduce risk?</i>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Emergency Management Operations Manual	Local	Deputy City Administrator
<i>How does this reduce risk?</i> Emergency management and operations plan following NFPA 1600.				
Continuity of Operations Plan	Yes	Emergency Management Operations Manual	Local	Deputy City Administrator
<i>How does this reduce risk?</i> <i>Plans for continued services and leadership.</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Emergency Management Operations Manual and Ohio Homeland Security TRA	Local/State	Deputy City Administrator
<i>How does this reduce risk?</i> <i>Gap identification</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Post-Disaster Recovery Plan	Yes	Emergency Management Operations Manual	Local	Deputy City Administrator
<i>How does this reduce risk?</i> <i>Provides guidance for disaster recovery and reduce injury and losses.</i>				
Public Health Plan	No	Franklin County Public Health	County	Health Commissioner
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of Grove City to oversee and track development.

Table 9.13-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits?	Yes	The Planning Commission and City Council approve development plans. Development oversees.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Tracked through internal software and viewable on the City website.
Do you have a buildable land inventory?	Yes	All City land is zoned. Parcels zoned buildable are identified
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Grove City and their current responsibilities that contribute to hazard mitigation.

Table 9.13-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Building Division	Yes	The Building and Zoning Division is responsible for ensuring compliance with local, state and international building, housing and zoning codes, which keep the community safe and attractive.
Development Department	Yes	The Grove City Development Department administers economic development and planning activities for the City. Within this scope, the department works with the business community to create and retain jobs, promote business growth and ensure quality and balanced development. In addition, the department works closely with Planning



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		Commission, City Council and various city agencies to maintain the standards set forth by the City for quality development.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Grove City Development Department administers economic development and planning activities for the City. Within this scope, the department works with the business community to create and retain jobs, promote business growth and ensure quality and balanced development. In addition, the department works closely with Planning Commission, City Council and various city agencies to maintain the standards set forth by the City for quality development.
Service Department	Yes	The Service assures contractors build infrastructure according approved plans and regulations.
Construction/Building/Code Enforcement Department	Yes	The Building and Zoning Division is responsible for ensuring compliance with local, state and international building, housing and zoning codes, which keep the community safe and attractive.
Safety Department	Yes	Oversee the operations of the Police and Building Divisions
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	OWS service is contracted with the Franklin County EM&HLS, Alert FC and GC Alert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Service Department works with OEPA to enforce stormwater management and maintenance
Mutual aid agreements	No	-
Human Resources Manual	Yes	Emergency Management and Operations Manual /Positions Descriptions identify roles and responsibilities.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Certified Development Staff
Engineers or professionals trained in building or infrastructure construction practices	Yes	Professional Engineering (P.E.) Staff (4) and Consulting Engineers oversee construction.
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Building Division Inspectors State and ICC Certifications
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	GIS Supervisor and Specialist in the Information Services Department development and maintain all City infrastructure information in ARC GIS.
Environmental scientist familiar with natural hazards	Yes – 3 rd Party	Consulting Engineering
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to Grove City.

Table 9.13-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Grove City.

Table 9.13-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Business and Communication Officer and (3) Specialists provide day today and emergent public communication
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Alert FC and GC Alert - Everbridge
Natural disaster/safety programs in place for schools	Yes	South-Western City Schools
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Grove City Text Alerts, Social Media, Website

Community Classifications

The table below summarizes classifications for community programs available to Grove City.

Table 9.13-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Residential – 4 Commercial – 3	2017
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	2 City 2X township	2020 - Jackson Township Fire Department
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.13-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.13.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Grove City.

Table 9.13-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Grove City (C)	33	43	\$163,350.86	4	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Grove City.

Table 9.13-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Yes, The Floodplain MGR. identifies areas prone to flooding through GIS mapping. Most areas are at or near identified streams and tributaries.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	Yes, None currently.
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Site inspections by building division. None.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None -
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes -
NFIP Compliance	
What local department is responsible for floodplain management?	Safety Dept./Div. of Building
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	All that you mentioned
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Building Permit Review

NFIP Topic	Comments
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	1329 Last updated: 2004
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Exceeds, no fill allowed in residential properties
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Chapter 1101.03, identifies governing regulations in floodplain areas.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.13.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.13-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	127	NA	57	NA	163	NA	312	NA	258	NA
Multi-Family	2	NA	1	NA	32	NA	16	NA	30	NA
Other (commercial, mixed-use, etc.)	223	NA	59	NA	14	NA	25	NA	11	NA
Total Permits Issued	352	NA	117	NA	209	NA	353	NA	299	NA

Table 9.13-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Stringtown Road Apartments (Bentley)	Residential	138	2384 Stringtown Road 040-005652	Flood Zone AE	Apartment, Traditional
Shoppes at 665	Commercial	1	2811 London-Groveport Road 040-013658	Flood Zone A	Retail
Concord Fabricators	Industrial	1	6511 Seeds Road 040-007498	N/A	Industrial



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Becknell	Industrial	1	3563 Southpark Place 040-008992	N/A	Industrial
The Ashford of Grove City	Residential	160	3197 Southwest Boulevard 040-013660	Flood Zone AE	Assisted Living
Grove City Family Denistry	Office	1	3031 Columbus Street 040-002174	N/A	Medical
KFC	Commercial	1	2815 London-Groveport Road 040-014604	Flood Zone A	Restaurant
Trail View Run	Residential	40	1419/1399 Borror Road 040-015516, 040-015517, 040-015699	Flood Zone A	Condominium, Single-Family
The Courtyards at Beulah Park	Residential	104	3811 Southwest Boulevard 040-004273, 040-004263, 040-004271, 040-004272	Flood Zone A	Condominium
Beulah Park Apartments	Residential	376	3451 Kells Way 040-016119	Flood Zone A	Apartments, Traditional
TOSOH	Industrial	1	3600 Gantz Road 040-007623	Flood Zone A	Industrial
Shoot Point Blank	Commercial	1	3004 Turnberry Court 040-014279	N/A	Retail
Danbury Grove Assisted Living (Subarea I)	Residential	88	3522-3604 Chalford Drive 040-016054	Flood Zone A	Assisted Living
Byers Pre-Owned Center	Commercial	1	5887 North Meadows Drive 040-009552	N/A	Retail
Homestead Senior Living	Residential	130	4990 Hoover Road 040-009224	Flood Zone A	Apartment, Age Restricted
Stringtown Animal Hospital	Commercial	1	1320 Stringtown Road 040-009263	N/A	Service
Auto Zone	Commercial	1	2682 London-Groveport Road 040-008048	N/A	Retail
Schoedinger Funeral Home	Commercial	1	4242 Hoover Road 040-005551	N/A	Service
Arrowleaf Apartments	Residential	28	2060 Shirlene Drive 040-006839	N/A	Apartments, Income Restricted
Farmstead	Residential	120	62 Jackson Pike 160-003087, 160-000205, 180-000204, 160-0000960, 180-000201	Flood Zone AE	Single-Family, Multi-Family (Not Specified)



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Browns Farm	Residential	320	5154 Browns Farm Lane 040-017252, 040-016050	N/A	Condominium, Apartment (Age Targeted)
Speedway	Commercial	1	1895 Stringtown Road 004-04537	N/A	Retail
Bank of America	Commercial	1	2336 Stringtown Road 040-004295	N/A	Service
Silco Fire and Security	Industrial	1	2345 Southwest Boulevard 040-009220	N/A	Office, warehouse, training facility
Grove City Villas	Residential	30	Northwest corner of Southwest Blvd. and Street E in the Beulah Park subdivision 040-016054	N/A	Condominium
Novocaine Lounge	Commercial	1	3425 Grant Avenue, Suite B 040-000237	N/A	Service
Grove City Veterinary Hospital	Commercial	1	4350 Grove City Road 040-008769	N/A	Service
Taco Bell	Commercial	1	3340 Broadway 040-001240	N/A	Restaurant
Tigerpoly	Industrial	1	6231 Enterprise Parkway 040-010335	Flood Zone A	Manufacturing
TriLink Storage	Commercial	N/A	5965 Haugn Road 040-010230	N/A	Service
Becknell Seeds Road	Industrial	N/A	6335 Seeds Road 040-004959	Flood Zone A	Industrial
All R Friends	Office	1	1640 Buckeye Place 040-015106	N/A	Disability Services
Beulah Park Subarea E	Residential	52	East side of Demorest Road, South of Southwest Boulevard 040- 000413	N/A	Single Family
Sugar Maple Commons	Residential	105	South of Holton Road and West of State Route 104 040-013869	N/A	Apartment, Age Restricted
Car Source	Commercial	1	1200 Stringtown Road 160-001099	N/A	Used Car Sales
Hidden Chase	Residential	80	East of Broadway and North of Orders Road 040-017394, 040-017395, 040-017397	N/A	Condominium
Broadway Professional Park	Industrial	1	3491 Farm Bank Way	N/A	Flex Building



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Kirk Williams	Industrial	1	040-009908 2734 Home Road 040-002426	N/A	Freezer Addition
Parkway Centre South (Five Below)	Commercial	1	1715 Stringtown Road 040-012076	N/A	Retail
Smokey Bones	Commercial	1	1615 Stringtown Road 040-013270	N/A	Restaurant
Farmstead Subarea H	Residential	87	62 Jackson Pike 040-016097, 040-016100	Flood Zone AE	Single Family
Brookpark Middle School	Institutional	1	3160 Demorest Road 040-016445	N/A	School
Kmart	Commercial	1	2400 Stringtown Road 040-005710	Flood Zone AE	Retail Redevelopment
Silco	Industrial	1	2346 Southwest Boulevard 040-008159	Flood Zone A	Development Plan Amendment
Pinnacle Quarry	Residential	208	White Road and SR 104 160-001492, 160-002631, 160-000056, 160-002507, 160-002459	Flood Zone AE	Single Family, Condominium
Kiddie Academy	Commercial	1	4248 Buckeye Parkway 040-016276	N/A	Service
Beulah Park Subarea G	Residential	82	South of Southwest Blvd., east of Demorest Road, west of the Baltimore and Ohio R.R. Company 040-017264	N/A	Apartment, Traditional
Wright-Patt Credit Union	Commercial	1	2400 Stringtown Road 040-005710	N/A	Service
1804 Properties	Office	1	West of Hoover Road and North of Quail Creek Boulevard 040- 016671	N/A	Medical
Moo Moo Express Car Wash	Commercial	1	2607 London-Groveport Road 040-014760	N/A	Service
Western Grove MOB	Office	1	Subarea 'A' of Beulah Park 040-016214-00	Flood Zone A	Medical
Burger King	Commercial	1	2811 London-Groveport Road 040-013658	N/A	Restaurant



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Beulah Park Subarea D	Residential	86	East side of Demorest Road, approximately 1,200 feet north of Grove City Road 040- 016219	Flood Zone AE	Single Family
Tosoh	Industrial	1	3600 Gantz Road 040-007623-00	Flood Zone A	Addition
Kram-It Self Storage	Commercial	11	3170 Urbancrest Industrial Drive 040-009249	N/A	Development Plan Amendment
Forge Biologics	Industrial	1	3900 Gantz Road 040-007564	N/A	Building Addition
Columbus Powersports	Commercial	1	2713 Home Road 040-002431	Flood Zone AE	Development Plan/Special
Tosoh	Industrial	1	3600 Gantz Road 040-007623-00	Flood Zone A	Building Addition
Beautiful Savior Lutheran Church	Educational	1	2213 White Road 040-010581	N/A	Building Addition
Chick-fil-A	Commercial	1	1696 Stringtown Road 040-007340	N/A	Restaurant
Autumn Grove Addition	Residential	69	4550 Rensch Road 040-012465	N/A	Single Family
Sheridan Dental	Office	1	East of Broadway and South of Parlin 040-015109	N/A	Medical
Hayes Intermediate School	Educational	1	4436 Haughn Road 040-004138	Flood Zone AE	Building Addition
Shoppes at Beulah	Commercial	N/A	Southwest corner of Southwest Blvd. and Columbus St. 040-017255	N/A	Retail
Sherwin Williams	Commercial	1	3019 Turnberry Court 040-014278	N/A	Retail
Petsuites	Commercial	1	1260, 1270, & 1280 Stringtown Road 040-014325	N/A	Dog/cat kennel
Southwestern Career Academy	Educational	1	4750 Big Run Road 040-011536	Flood Zone AE	Building Addition
Beulah Park Subarea C Lennar Homes	Residential	19	South of Southwest Blvd., East of Demorest Rd., West of Indiana/Ohio Railroad Tracks 040-016132	N/A	Single Family
Beulah Park Subarea C Epcon Communities	Residential	11	South of Southwest Blvd., East of Demorest Rd., West of Indiana/Ohio Railroad Tracks 040-016146	N/A	Condominium
Mid-Ohio Food Collective	Industrial	1	3960 Brookham Drive	N/A	Freezer Addition



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
			040-001228, 040-001093		
Sharp Home	Residential	1	3530 Sunshine Park Place 040-000890	N/A	Single Family
4238 Broadway	Residential	1	4238 Broadway 040-000696	N/A	Single Family
Builtrite Properties	Industrial	1	5873 Haughn Road 040-010580	N/A	Industrial
4238 Broadway - Residential In PSO	Residential	1	4238 Broadway 040-000696	N/A	Single Family
Hickory Creek Subdivision	Residential	81	North of Orders and West of Haughn Roads 040-009246	N/A	Condominium
Known or Anticipated Major Development in the Next Five (5) Years					
Broadway Live	Residential, Commercial	> 144 units	Broadway and Columbus Street 040-000097, 040-000603, 040-000207040-000866, 040-000222, 040-000046, 040-000492, 040-000120, 040-000090, 040-000024	Flood Zone AE	Residential, retail, offices, restaurants
Plum Run	Residential	94	Northeast corner of London Groveport Road and Jackson Pike 040-012710	Flood Zone AE	Condominiums
Plum Run	Residential	266	Northeast corner of London Groveport Road and Jackson Pike 040-012710	Flood Zone AE	Single-Family
Courtyards at Mulberry Run	Residential	74	North and south side of White Road east of McDowell Road and west of I-71 160-002476, 040-002898	Flood Zone AE	Single-Family
Season's Grove	Residential	1	1050 Lamplighter Drive 040-012669	N/A	Residential, Age-Targeted
Harris Property	Residential	323	Northwest corner of London Groveport Road and Borror Road 040-017497, 040-017498, 040-017499	Flood Zone A	Single-Family

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.13.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Grove City's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Grove City has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.13-1. Grove City Hazard Area Extent and Location Map-Flood

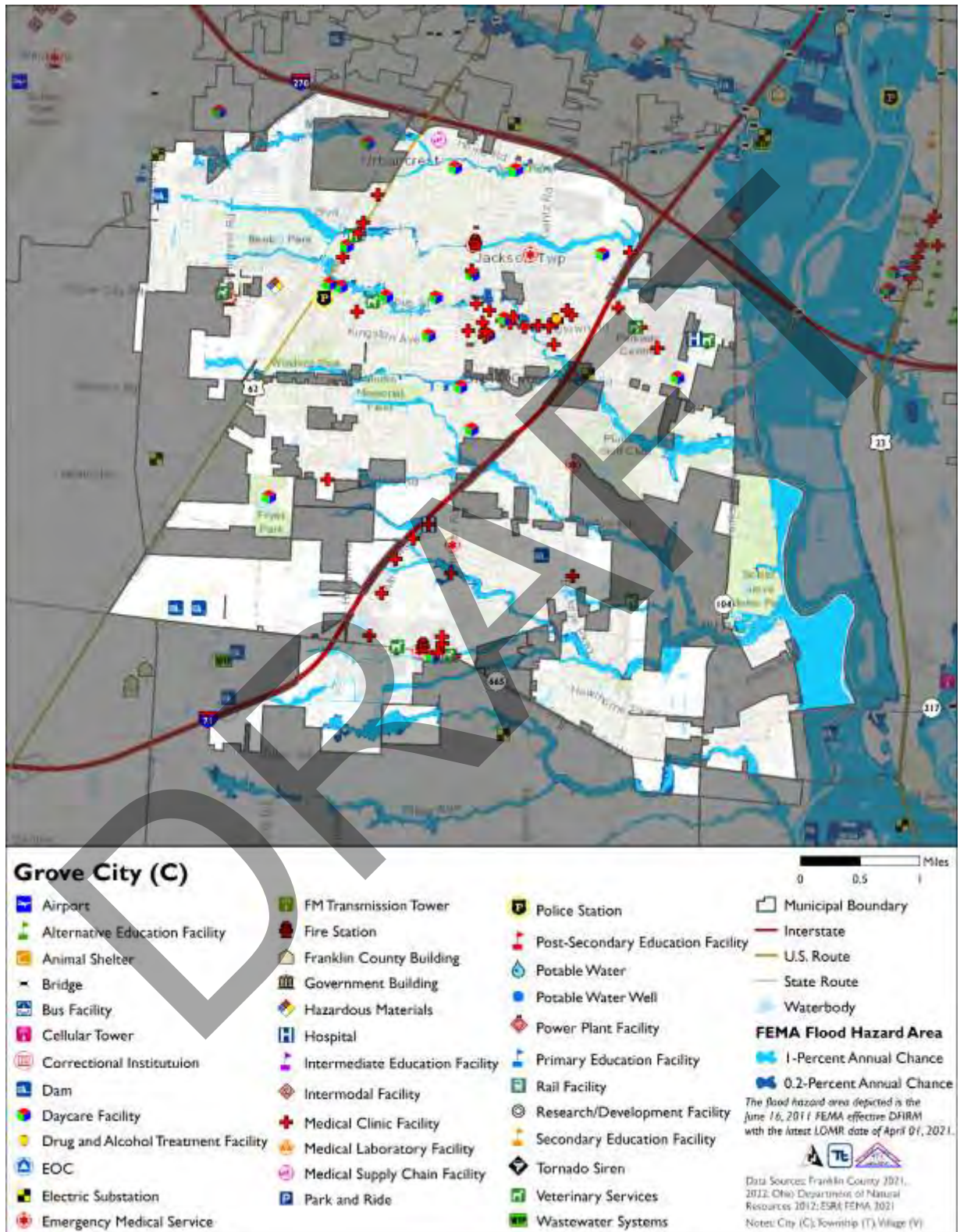


Figure 9.13-2. Grove City Hazard Area Extent and Location Map-Inland Erosion

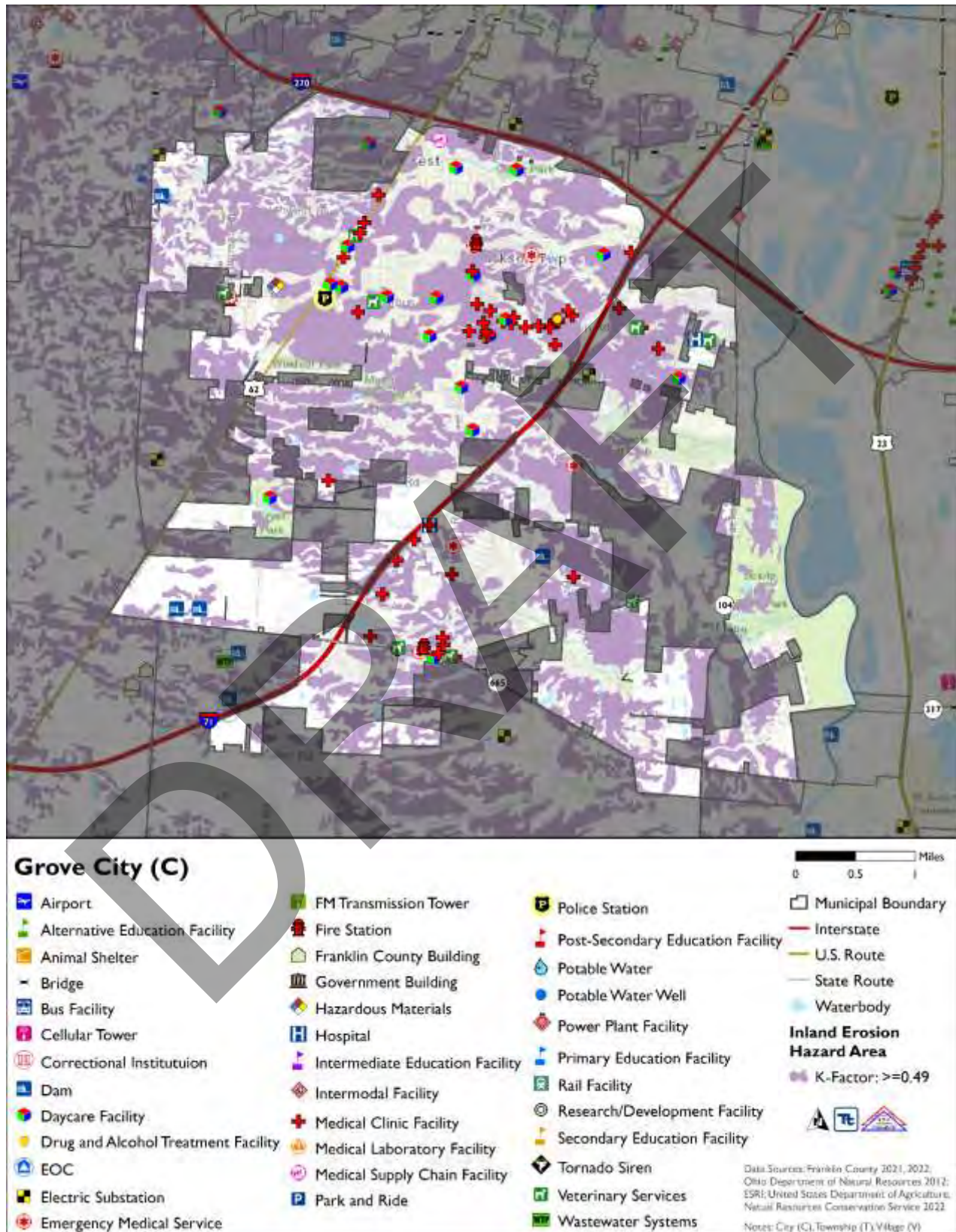
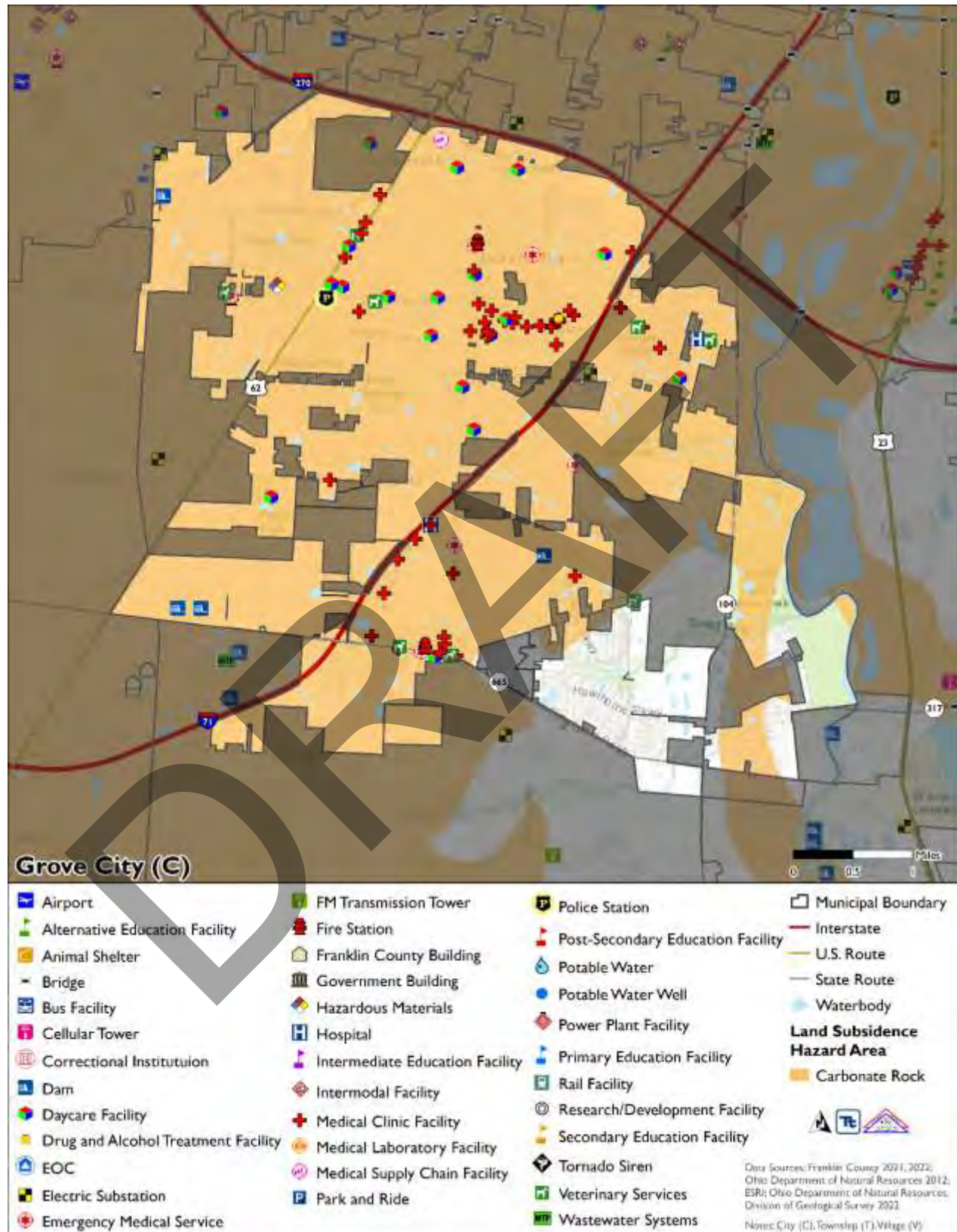


Figure 9.13-3. Grove City Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Grove City's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Grove City experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.13-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City did not experience additional damages and losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City did not experience additional damages and losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City did not experience additional damages and losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Grove City. Grove City reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Grove City indicated the following:

Table 9.13-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.13-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Grove City

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	4	3
0.2-Percent Annual Chance Flood Event Hazard Area	5	4
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	75	67
Subsidence (Karst/Carbonate Rock) Hazard Area	116	99
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Grove City identified the following vulnerabilities within its community:

- Grove City has four repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Ohio ENT
 - CONCORD CHAPEL ANIMAL HOSPITAL
 - THE BUCKEYE RANCH, INC.
 - Grove City Christian Child Care Center
- The City has three critical facilities that do not have backup power installed. This means that they cannot operate during a power outage.
- The City does not have backup power available for traffic signals and during power outages the signals will not operate. There are three critical intersections that affect the flow of traffic.

- The City actively works to mitigate damages caused by natural hazards through communication and community outreach. The outreach list is limited, and the City is working to update and maintain a list of all business owners in the City.
- The City is unable to be self-sufficient for a water supply in the case of a drought event.
- The City's native species are at risk from invasive species which may harm local ecosystems.
- The City has limited information on location and capabilities of critical infrastructure in the City.
- There are numerous reports of flooding issues throughout the City including numerous roads, parks, and housing developments. *
- The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events. *

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.13.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.13-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed)	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
		If in progress or completed, please describe the funding source, cost and who is implementing.	Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for repetitive loss structures to permanently reduce damage to these structures (2 known properties est. at 400,000 /4 years)	Mayor's Office	No Progress	No	-	-
Seek funding for back-up generators for critical public buildings (5 facilities @ 500,000 / 6 months)	Mayor's Office	In Progress	Yes	No Backup Power, 10-15K each. 3 facilities completed 2022	Service Department
Seek funding for lightning detection/warning for city parks (45,000 / 6 months)	Mayor's Office	No Progress	No	-	-
Seek funding for backup power generators for evacuation route intersections. (120,000 / 3 months)	Mayor's Office	In Progress	Yes	Battery backup and generator connections for critical intersections \$10K each : Still lacking 3	Service Department
Seek funding for backup power for 5 existing pump stations. (500,000 / 6 months)	Mayor's Office	Complete	No	-	-
Seek funding for backup power for existing water booster stations/water tanks. (50,000 / 6 months)	Mayor's Office	No Progress	No	-	-
Work with Franklin County Emergency Management and Homeland Security to develop public educational outreach regarding all natural hazards and Franklin County's susceptibility to those hazards then make available on city's website. (5,000 / ongoing)	Mayor's Office	No Progress	No	-	-



Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed)	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
		If in progress or completed, please describe the funding source, cost and who is implementing.	Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Potential changes in the operation of the Columbus sanitary sewer system could result in the flooding of 10 homes in the southeastern section of Grove City, Scioto Meadows/Hibbs Rd. (10 homes, 300,000)	Mayor's Office	No Progress	No	-	-

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Grove City identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, Grove City has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Grove City participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.13-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	X	-	X	-	X	X
Disease Outbreak	X	X	-	X	-	-	X	-	-	X
Drought	X	X	-	X	-	-	X	-	-	X
Earthquake	X	X	-	X	X	-	X	-	X	X
Extreme Temp	X	X	-	X	X	-	X	-	X	X
Flood	X	X	-	X	-	-	X	-	X	X
Geologic	X	X	-	X	-	-	X	-	-	X
Invasive Species	X	X	X	X	-	-	X	X	-	X
Severe Weather	X	X	-	X	X	-	X	-	X	X
Severe Winter Weather	X	X	-	X	X	-	X	-	X	X
Tornado	X	X	-	X	X	-	X	-	X	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.13-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Grove City will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.13-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Grove City-001	Repetitive Loss Mitigation	<p>Problem: Grove City has four repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	The Repetitive loss structures will no longer flood as frequently.	>\$100,000 per property	High	SIP	SP
2023-Grove City-002	Flood Vulnerability Evaluation	<p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Ohio ENT CONCORD CHAPEL ANIMAL HOSPITAL THE BUCKEYE RANCH, INC. 	Flood	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	Critical facilities will be able to continue to operate and will not flood as often.	TBD after feasibility assessment	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<ul style="list-style-type: none"> Grove City Christian Child Care Center <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p>										
2023-Grove City-003	Backup Generators	<p>Problem: The City has three critical facilities that do not have backup power installed. This means that they cannot operate during a power outage.</p> <p>Solution: The City will implement a generator sizing study and will seek funding for back-up generators for three critical public buildings. The City will install generators and implement a routine maintenance plan for each.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	2	Less than 5 years	Engineer, Department of Public Works,	HMGP, BRIC, City Budget	Critical facilities will be able to operate during a hazard event.	> \$100,00 per generator	High	SIP	ES
2023-Grove	Traffic Generators	<p>Problem: The City does not have backup power available for traffic signals and during power outages the</p>	Dam/Levee, Disease Outbreak,	2	Less than 5 Years	Service Department	HMGP, BRIC	Traffic signals will be able to	\$10,000 per generator	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
City-004		signals will not operate. There are three critical intersections that affect the flow of traffic. Solution: The City will implement a generator study to determine the size and capacity of the generator needed at 3 critical intersections.	Drought, Earthquake, Extreme Temp, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado					operate during power outages				
2023-Grove City-005	Critical Incident and Communication Plan	Problem: The City actively works to mitigate damages caused by natural hazards through communication and community outreach. The outreach list is limited, and the City is working to update and maintain a list of all business owners in the City. Solution: The City will continue to update and maintain the City business owner contact list.	Dam and Levee Failure, Disease Outbreak, Earthquake, Drought, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Invasive Species, Tornado;	1	6 months	Department of Economic Development	HMGP, City Budget	The City will have an updated contact list of residents in the City.	\$500	High	LPR, EAP	ES
2023-Grove City-006	Drought Contingency and	Problem: The City is unable to be self-sufficient for a water supply in the case of a drought event.	Drought	1, 6	6 months	Administration Department of Public	City Budget	The City will have a plan during a drought event.	\$1,000	High	LPR	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
	Communication Plan	Solution: The City will produce, when needed, a drought contingency and communication plan with the City of Columbus, who provides water to the City, for additional resources.				Works/Service Department City of Columbus						
2023-Grove City-007	Invasive Species Prevention	Problem: The City's native species are at risk from invasive species which may harm local ecosystems. Solution: The City, through the Department of Community Relations and the Department of Service, Division of Urban Forestry, will create and distribute guides to the community through social media and physical print, warning residents of certain species of plants that are considered urban forestry. Additionally, The City, through the Department of Community Relations and the Department of Service, Division of Urban Forestry, will, annually, engage in a social media campaign to educate the City not to bring in pests and vegetation that may pose a threat to the City. The campaign shall mirror messaging of the Oregon "Don't Pack a Pest method."	Invasive Species	5	6 months	Department of Community Relations Department of Service, Division of Urban Forestry	City Budget	The City will ensure residents are more knowledgeable.	\$1,000	High	NSP	NR
2023-Grove City-008	Critical Infrastructure Database	Problem: The City has limited information on location and capabilities of critical infrastructure in the City. Solution: The City, via the Department of Information Services, GIS Division, shall create and maintain a GIS	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic,	6	1 Year	Department of Information Systems, GIS Department of Public Safety, Division of Building,	City Budget, HMGP	The City will be more aware of critical infrastructure and their capabilities.	\$1,000	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<p>database of all critical infrastructure in the City. The strategy is as follows:</p> <ul style="list-style-type: none"> Identify all critical infrastructure in the city. This includes things like hospitals, power plants, water treatment facilities, and transportation hubs. Collect data on each piece of infrastructure, such as its location, size, function and ability to provide backup power. Enter the data into a GIS database. Make the database accessible to emergency management personnel. <p>This strategy would be valuable for emergency management because it would provide a centralized location for all critical infrastructure of the City.</p>	Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado			Department of Economic Development						
2023-Grove City-009	City Wide Flood Study and Infrastructure Fix*	<p>Problem: There are numerous reports of flooding issues throughout the City including numerous roads, parks and housing developments.</p> <p>Solution: The City will implement a City wide flood study to determine what is creating the flooding issues throughout the entire City. Once causes of flooding are determined, cost effective solutions will be implemented to reduce issues.</p>	Flood	2,6	Less than 5 Years	Floodplain Administrator, Department of Public Safety,	FMA, BRIC, CDBG, HMGP	The City will have reduced flooding issues.	TBD after Study	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Grove City-010	Utility Wires*	<p>Problem: The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events.</p> <p>Solution: The City will conduct a study to determine if it is feasible to move utility wires underground to prevent hazard events from knocking them down. Once feasibility is determined, the City will implement a process to start moving wires underground.</p>	Dam/Levee, Earthquake, Extreme Temp, Severe Summer Weather, Severe Winter Weather, Tornado	2,6	Less than 5 Years	Department of Public Works	CDBG, HMGP, BRIC, City Budget	The City will experience less connection and power issues.	TBD after Study	High	SIP	SP, PR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.13-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Grove City-001	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High
2023-Grove City-002	Flood Vulnerability Evaluation	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2023-Grove City-003	Backup Generators	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-Grove City-004	Traffic Generators	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2023-Grove City-005	Critical Incident and Communication Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Grove City-006	Drought Contingency and Communication Plan	1	1	1	1	1	1	1	1	1	1	0	1	0	0	11	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Grove City-007	Invasive Species Prevention	0	1	1	1	1	1	1	1	1	1	0	1	1	0	11	High
2023-Grove City-008	Critical Infrastructure Database	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Grove City-009	City Wide Flood Study and Infrastructure Fix*	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2023-Grove City-010	Utility Wires*	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.14 CITY OF GROVEPORT

This section presents the jurisdictional annex for the City of Groveport that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Groveport participated in the planning process, an assessment of the City of Groveport's risk and vulnerability, the different capabilities used in the City of Groveport, and an action plan that will be implemented to achieve a more resilient community.

9.14.1 Hazard Mitigation Planning Team

The City of Groveport identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Groveport departments, including the City Administrator, Finance Director, Engineer Department, Public Service Director and Building/Zoning Department. The Building Official and City Engineer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.14-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Stephen Moore, Building Official	Name/Title:	Stephen Farst, City Engineer
Address:	655 Blacklick Street Groveport, Ohio	Address:	655 Blacklick Street Groveport, Ohio
Phone Number:	614-830-2045	Phone Number:	614-830-2067
Email:	smoore@groveport.org	Email:	sfarst@groveport.org
NFIP Floodplain Administrator			
Name/Title:	Benjamin King, City Administrator/Floodplain Administrator		
Address:	655 Blacklick Street Groveport, Ohio 43125		
Phone Number:	614-830-2041		
Email:	bking@groveport.org		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.14.2 Municipal Profile

The City of Groveport is in the southeast corner of Franklin County almost entirely encompassed by Madison Township. The City of Obetz borders parts of Groveport to the west. Located 12.1 miles southeast of Columbus, the City of Groveport is known for its scenic golf course, parks, and recreation.

According to the American Community Survey, the 2021 population for the City of Groveport was 5,942, a 11.11 percent increase from the 2010 Census population of 5,348. Data from the 2021 American Community Survey indicates that 5 percent of the population is 5 years of age or younger and 14.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.14.3 Jurisdictional Capability Assessment and Integration

The City of Groveport performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Groveport to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Groveport and provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.14-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2017 Ohio Building Code/2019 Residential Code of Ohio	Local	Building/Zoning
<i>How does this reduce risk?</i> The building codes establish minimum regulations for buildings and their systems using prescriptive and performance related provisions. These provisions include fire, sanitation, construction, floodplain etc.				
Zoning/Land Use Code	Yes	2019 Zoning Code	Local	Building/Zoning
<i>How does this reduce risk?</i> The City zoning code has both general and specific requirements within zoning districts that require determination of land suitability and environmental standards for development in the City. Staff review is required for all development proposed in the City.				
Subdivision Ordinance	Yes	2019 Zoning Code	Local	Building/Zoning & Engineering
<i>How does this reduce risk?</i> The subdivision regulations require developers to show locations of existing features such as woods, wetlands, water courses, floodplains, natural features, contours, drainage easements and FEMA floodway fringe/floodway boundaries. By showing this information on the development plans staff, planning commission and City council can make educated decisions on how best to protect these features.				
Site Plan Ordinance	Yes	2019 Zoning Code	local	Building and Zoning Dept.
<i>How does this reduce risk?</i> By requiring submittal of site plans for review and approval, staff can monitor development to check for development in the floodplain and other hazard areas and require compliance with those regulations prior to approval of the site plan.				
Stormwater Management Ordinance	Yes	Chapter 935	Local	Engineering
<i>How does this reduce risk?</i> Our stormwater management ordinance (Chapter 935 in the Codified Ordinances, City of Groveport) establishes design standards for stormwater drainage systems and stormwater management facilities ensuring that new development and redevelopment on lands within Groveport are properly and consistently designed and constructed to capture and convey runoff and to attenuate peak flows so that there is a reduction in risk of flooding on downstream properties. Moreover, the ordinance establishes during site planning and design on developing lands, a stream corridor protection zone that will prevent establishment of new structures in these zones that on most sites, include lands subject to inundation during a storm event. Preventing buildings in these areas reduces risk of losses due to flood damage.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 1341	Local	Building/Zoning
<i>How does this reduce risk?</i> The Flood Damage Code provides minimum safety standards for development and construction within the regulatory floodplain. The code requires applications and plans to be submitted for review and permit issuance prior to any development beginning in the SFHA of the City.				
Wellhead Protection	Yes	Source Water Assessment and Protection Plan (12/19/03 & 9/23/05).	Local	Public Service Dept/Engineering Dept
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Groveport has its own water treatment plant and well field that were designed and are operated and maintained according to requirements of the Ohio EPA. The wellfield was designed and constructed in 2003, with wellhead protection per requirements of the Ohio EPA, including to establish a 300-ft isolation zone surrounding each well and elevating the wellhead to above the one-percent chance flood. Wellhead protection reduces risk of contamination of the City's source water, thus providing a reliable and safe source of drinking water supply to residents. The City has and maintains a Source Water Assessment and Protection Plan.				
Emergency Management Ordinance	Yes	Ord. #1-92	Local	Mayor
<i>How does this reduce risk?</i> The ordinance requires an emergency operation plan be created and sets out the requirements to address the mitigation, preparedness, response and recovery from man-made, technological, and natural disasters and emergencies.				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Groveport Ohio 2004 Comprehensive Plan	Local	Building/Zoning, Engineering, Planning Commission & Council
<i>How does this reduce risk?</i> The City's Comprehensive Plan encourages the retention and protection of scenic and natural areas including streams, creeks, woodlands, and wetlands. The plan requires all new development need to make every effort to maintain the natural functions of the environment. The plan has an environmental overview that illustrates the environmentally sensitive areas of the City. The plan also allows for conservation development design, that allows for cluster type lots built around natural features and hazard areas.				
Capital Improvement Plan	Yes	Capital Improvement Plan	Local	Engineering/ Administration
<i>How does this reduce risk?</i> The City's Capital Improvement Plan provides for a vision of capital projects for upgrades and rehabilitation of the City's physical infrastructure including principally City streets, street lighting, and utility systems including water production, water distribution system (conduits), sanitary sewer collection system, and stormwater collection system. The plan - updated every year - provides a 5-year planning horizon and for water capital projects, a 10-year planning horizon. Planning in this manner ensures the infra-structure, notably the storm collection system, is well maintained and improved as needed, thus reducing risk of flooding.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Section 935	Local	Engineering
<i>How does this reduce risk?</i> The City is obligated through a requirement of the Ohio EPA, to operate its stormwater utility system under an NPDES permit for the City's Municipal separate stormwater system (MS4), which is renewed every five years by the Ohio EPA. Under this permit, the City developed and follows a Stormwater Management Plan that includes six minimum control measures (MCMs), including Publication education (MCM1), Public Involvement (MCM2), Illicit Discharge, Detection, Elimination (MCM3), Construction Site Stormwater Runoff Control (MCM4), Post-Construction Stormwater Management (MCM5), and Pollution Prevention/Good Housekeeping for Municipal Operations (MCM6). By implementing actions under the plan and within these MCM's, the City ensures storm runoff leaving the City's MS4 complies with state and federal water quality standards that will reduce risk of contamination to the environment by containing, and pretreating pollutants that can comeingle with stormwater runoff. Moreover, planning and operating measures in the plan will reduce erosion, and flooding caused by stormwater runoff volume and peak flows during intense storm events. Such measures include but are not limited to site controls during and after site construction on developing lands, that will attenuate peak runoff flows and capture sediment runoff.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Habitat Conservation Plan <i>How does this reduce risk?</i>	No	-	-	-
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> The plan provides the basis for a systematic approach to the solution of problems created by the threat or occurrence of disasters. It defines the responsibilities, functions, operational procedures and working relationships between the within the governmental entities and with private support groups and individual citizens. The planning process involved identification of hazards, assessment of resources and the development of response procedures. The goals to be achieved are to save lives and protect property by developing programs and operational capabilities that address mitigation, preparedness, response, and recovery for natural, technological, and civil or attack related emergencies.	Yes	Groveport-Madison Emergency Management District – Emergency Operations Plan	Local	Mayor/EOC Manager
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Post-Disaster Recovery Plan	No	-	-	-
How does this reduce risk?				
Public Health Plan	No	-	-	-
How does this reduce risk?				
Other	No	-	-	-
How does this reduce risk?				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Groveport to oversee and track development.

Table 9.14-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Building/Zoning & Engineering
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain & Stream Corridor Protection Zone
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	The City is a mix of agricultural, commercial, industrial, and residential development. The commercial area of the City is mainly located in the downtown district and along Groveport Road west of the downtown. The industrial district is located to the north along St Rt 33 and west of St Rt 317 and south along Rohr, Pontius and Hayes Roads. The residential areas are located around the downtown and also to the north and west. Agricultural areas are located along the Blacklick, Big Walnut and Walnut Creeks, with other areas located throughout the community and surrounding township.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Groveport and their current responsibilities that contribute to hazard mitigation.

Table 9.14-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The commission is made up for 5 appointed citizens, they review new development and make recommendations to City Council for approval, conditional approval or disapproval for new development in the City.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Zoning Board of Adjustment	Yes	The board is made up of 5 appointed citizens who hear appeals to zoning and building code determinations in the City.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Community Improvement Corporation
Public Works/Highway Department	Yes	The Public Service Dept consists of 24 full time employees, responsible for street maintenance, water treatment & distribution, parks & facility maintenance, sewer & stormwater conveyance, along with other typical public works tasks. The department is responsible for maintaining City owned properties & floodways along with emergency response for road closures.
Construction/Building/Code Enforcement Department	Yes	The department is made up of 4 full time employees that are responsible for reviewing and issuing permits for zoning, residential and commercial buildings, floodplain development and property maintenance.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Provided by Franklin County EMA
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	This is completed by our Public Service Dept. to maintain the stormwater systems, trim trees, pick-up brush and leaves. They also barricade roads if flooded.
Mutual aid agreements	Yes	Between Groveport and Madison Township for emergency management. Ord#44-92 and Township Resolution passed Sept. 2, 1992. Ord.#13-003 for Police Dept. personnel and equipment.
Human Resources Manual	No	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	City Engineer and Building Official
Engineers or professionals trained in building or infrastructure construction practices	Yes	City Engineer and Building Official
Planners or engineers with an understanding of natural hazards	Yes	City Engineer and Building Official
Staff with expertise or training in benefit/cost analysis	Yes	City Engineer and Director of Public Service
Professionals trained in conducting damage assessments	Yes	Building Official and City Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	City Engineer
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	Consider the following: Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Groveport.

Table 9.14-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Groveport.

Table 9.14-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	City Administrator or as appointed by Mayor
Personnel skilled or trained in website development	Yes	Each department has a staff member trained to place information on the City website
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Flood hazard info on website
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Franklin County EMA sirens
Natural disaster/safety programs in place for schools	Unknown	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Flood hazard info on website, handouts in Building Department office.

Community Classifications

The table below summarizes classifications for community programs available to the City of Groveport.

Table 9.14-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3 Residential 4 Commercial	May 26, 2020
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Madison Twp. Fire 03/3Y	June 29, 2020
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.14-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.14.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Groveport.



Table 9.14-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Groveport (C)	11	7	\$5,166.57	1	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Groveport.

Table 9.14-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none">Do you maintain a list of properties that have been damaged by flooding?	We have a list of properties with the SFHA, no properties damaged by flooding have been reported or found.
<ul style="list-style-type: none">Do you maintain a list of property owners interested in flood mitigation?How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No property owners have requested information on mitigation.
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none">If so, state what projects are underway.	No
<ul style="list-style-type: none">How do you make Substantial Damage determinations?How many were declared for recent flood events in your jurisdiction?	Per NFIP standards and guidance in FEMA publications. No recent flood events.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none">If there are mitigated properties, how were the projects funded?	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none">If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Building/Zoning
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none">If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Review permit applications, provide inspections, issue permits, provide FEMA publications at office and on website, floodplain layer on GIS
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Per NFIP standards and guidance in FEMA publications.
What are the barriers to running an effective NFIP program in the community, if any?	None

NFIP Topic	Comments
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	June 30, 2020
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Chapter 1341 July 24, 1995
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Zoning/Engineering site plan reviews
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Not at this time

9.14.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.14-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	5	0	0	0	3	0	21	0	11	0
Multi-Family	0	0	0	0	0	0	24	0	0	0
Other (commercial, mixed-use, etc.)	4	0	3	0	3	0	10	2	8	1
Total Permits Issued	9	0	3	0	6	0	55	2	19	1

Table 9.14-12. Recent and Expected Future Development

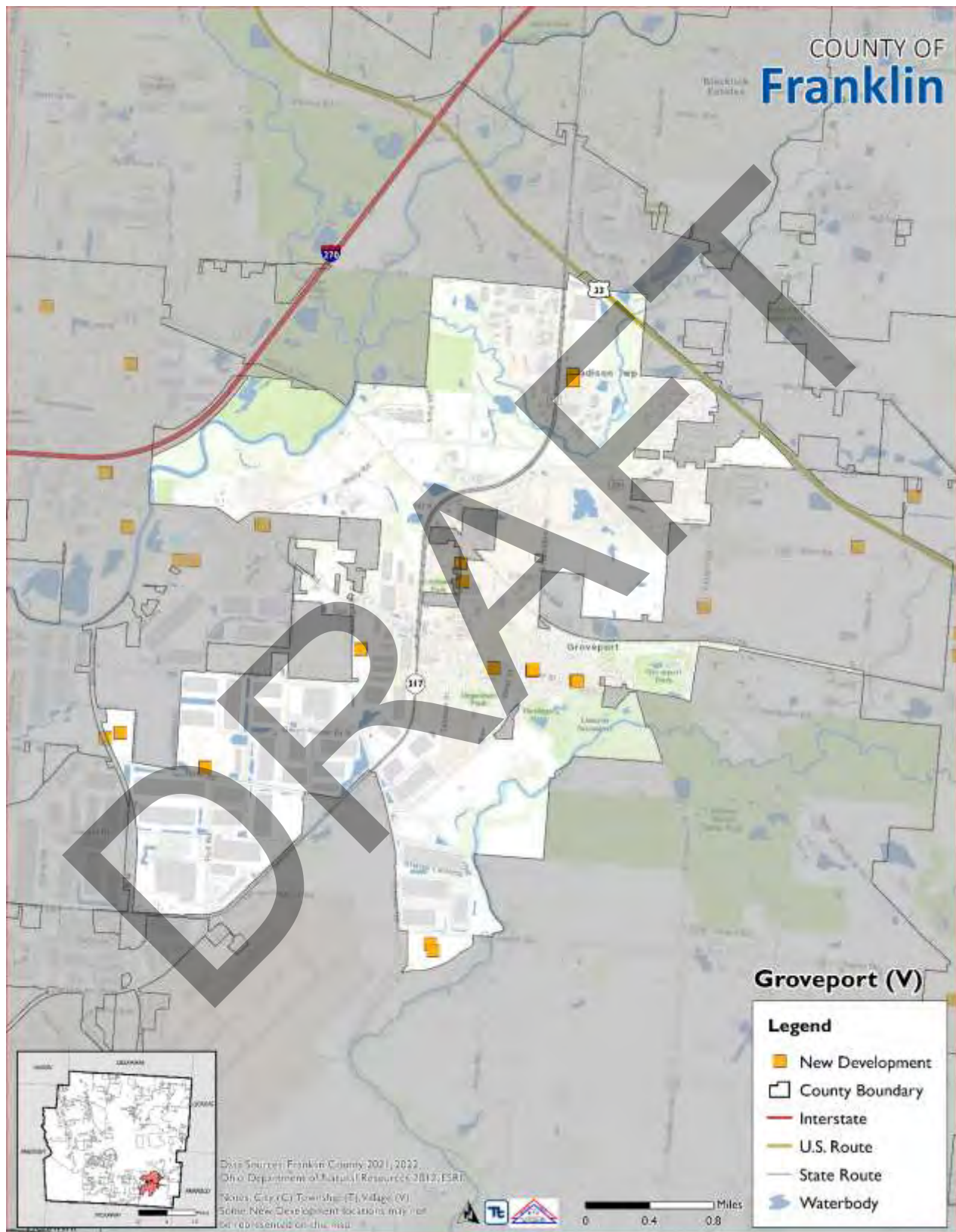
Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Hickory Grove Sections 3A & 3B	Residential	51 lots	N/A	None	Last phase of subdivision – 3A completed, 3B houses still under construction
Blue Stone	Commercial	3 lots	2400 Rohr Rd PID – 154-000002	None	Approximately 32-acre site developed into 3 lots. Lot 2 development complete with 2 warehouse buildings, lots 1 & 3 still to be developed.



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Hemmer	Commercial	3 lots	5770 Saltzgaber Rd PID #185-002966	None	Approximately 37-acre site developed into 3 lots. Lots 2 & 3 complete with 1 warehouse per lot, Lot 1 still to be developed
Pizutti - Hamilton Rd	Commercial	2 lots	4500 S. Hamilton Rd PID #185-001293 & 185-001294	Zone AE	Approximately 44-acre site developed into 2 lots. Both lots are completed with 1 warehouse on each lot.
Redwood Apartments	Residential	140 units in 24 buildings	5090 Hendron Rd PID #185-002762 & 185-002763	None	Approximately 23 acres developed with ranch-style apartments. Buildings are currently under construction.
Rarey's Port	Commercial	1 – 2 story building	674 Main Street 185-002946	None	Approximately .33-acre site developed with mixed use commercial building. Development completed.
Wert's Grove	Commercial	1- 2 story building	480 Main Street 185-000224 & 185-000200	None	Approximately .69-acre site developed with mixed use commercial building. Development completed.
Project Sunshine	Commercial	1 lot	3755 Hayes Rd 185-003034	Zone AE	Approximately 47-acre site developed into single lot with 1 warehouse. Development completed.
Professional Office	Commercial	2 lots	325 Main St	None	Approximately 1.2-acre site developed into 2 lots. Lot 1 is under construction. Lot 2 is still to be developed
Known or Anticipated Major Development in the Next Five (5) Years					
No Potential Development known at this time					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.14-1. City of Groveport New Development Map



9.14.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Groveport's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Groveport has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.14-2. City of Groveport Hazard Area Extent and Location Map-Flood

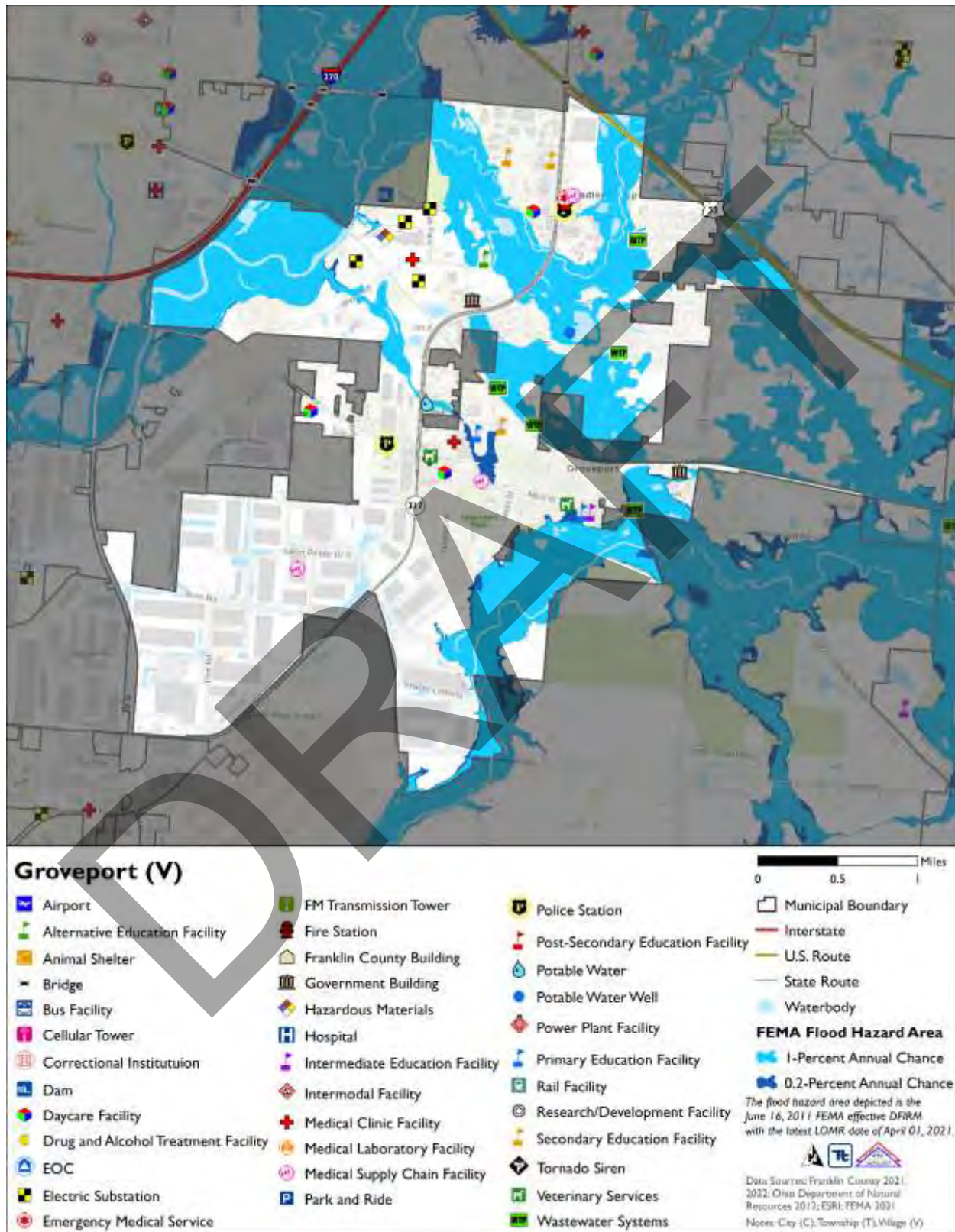


Figure 9.14-3. City of Groveport Hazard Area Extent and Location Map-Inland Erosion

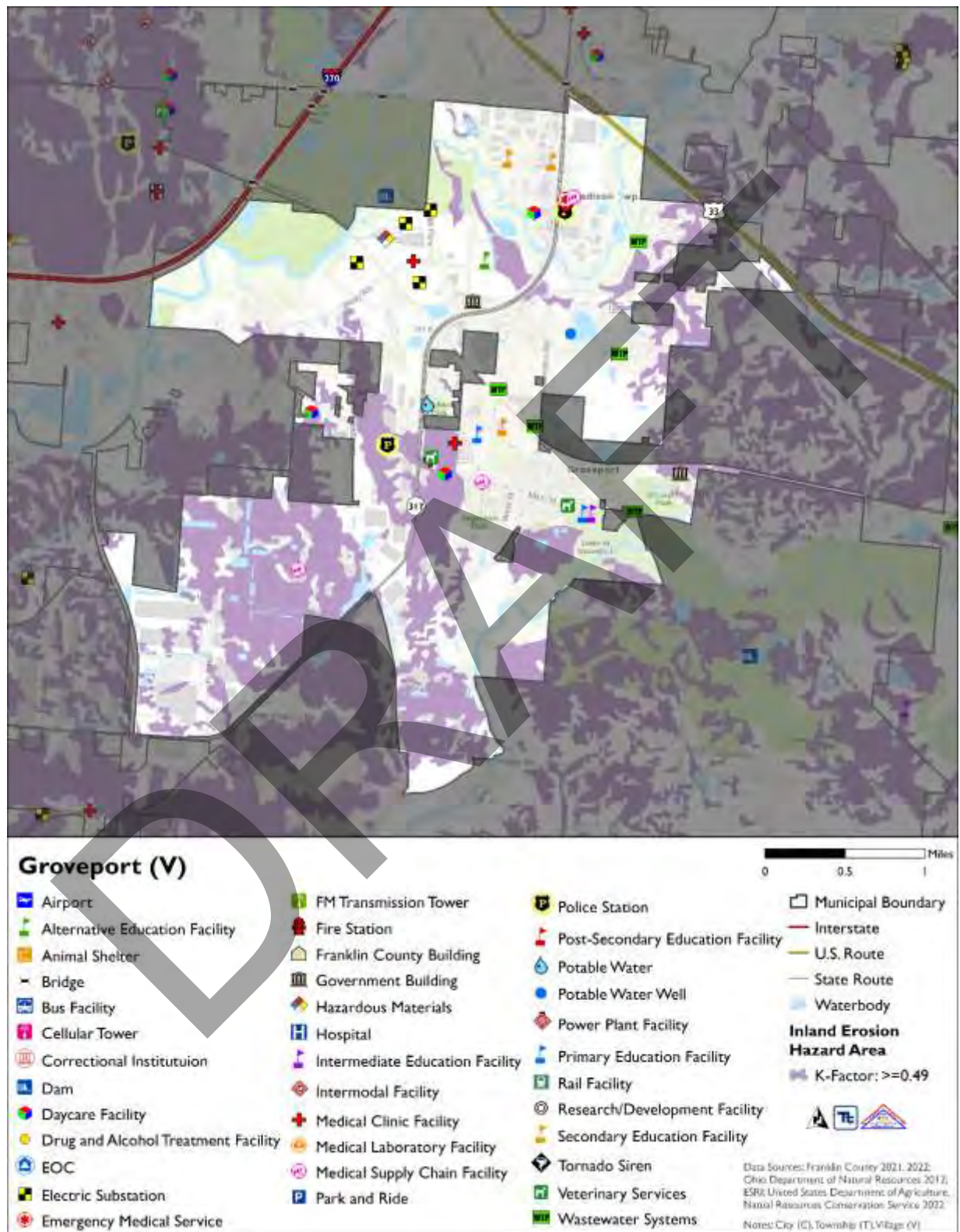
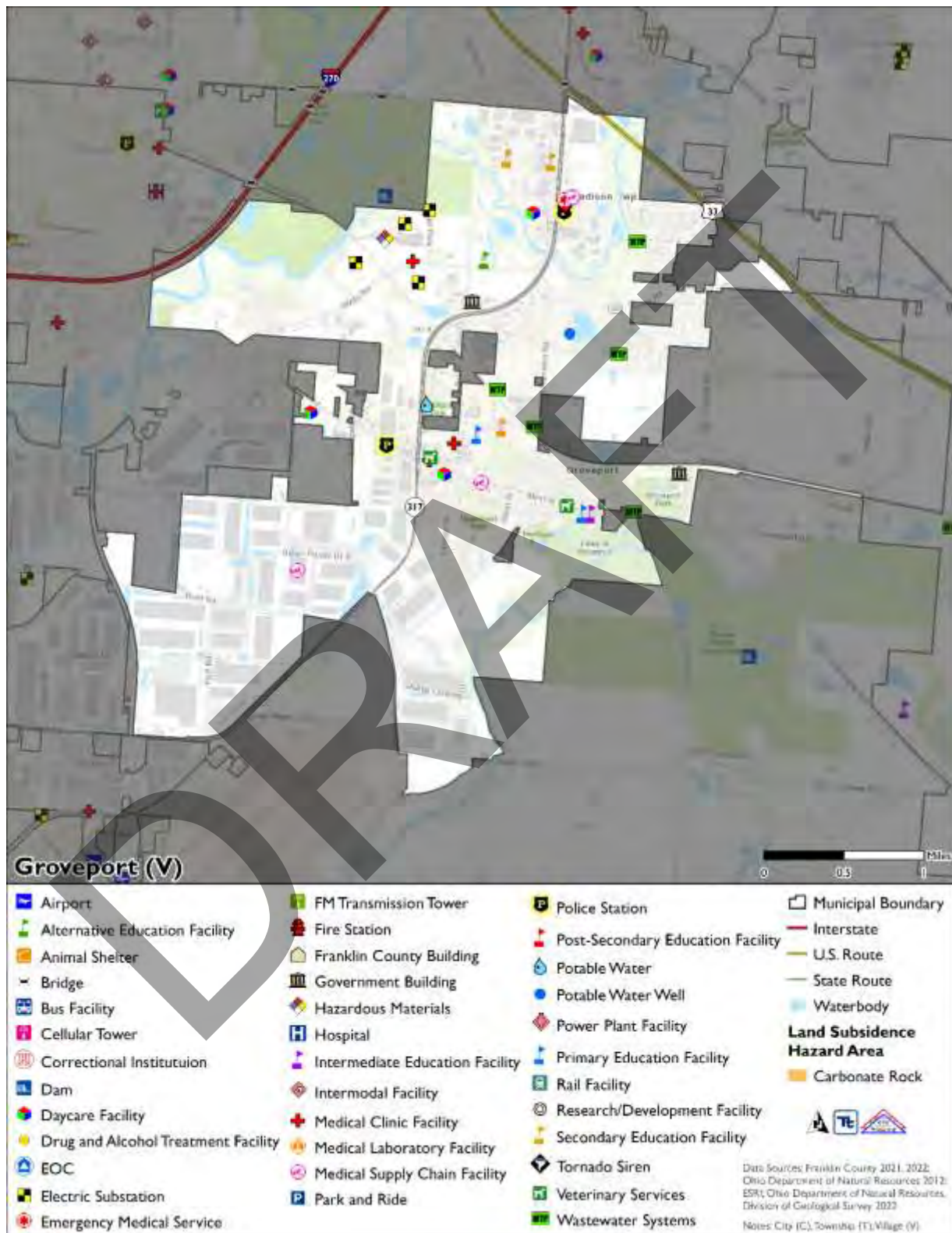


Figure 9.14-4. City of Groveport Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Groveport's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Groveport experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.14-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City of Groveport did not incur any damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City of Groveport did not incur any damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City of Groveport reported a cost of \$424,344.70 related to the COVID-19 Pandemic.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Groveport.

The City of Groveport reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Groveport agreed with the following hazard rankings:

Table 9.14-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.14-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Groveport

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	5	5
0.2-Percent Annual Chance Flood Event Hazard Area	5	5
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	6	5
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	19	18
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Groveport identified the following vulnerabilities within its community:

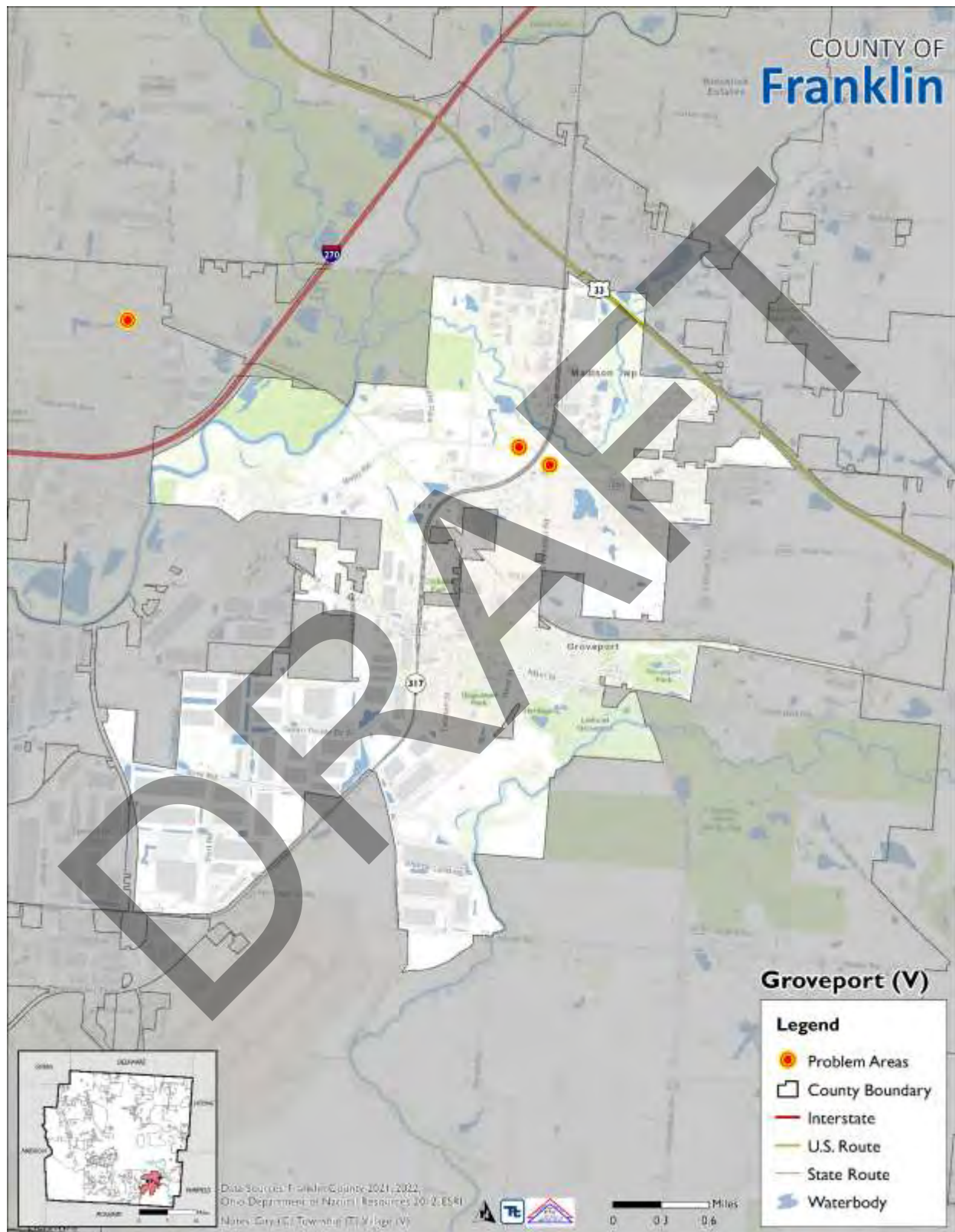
- Bixby Road and the intersection of Groveport Road and Rager Road are inundated during large magnitude flood events that come out of bank on streams adjacent to these roads. Flooding then requires road closure and thus, emergency vehicle access is interrupted, limiting emergency response to the public in these areas.
- When there are local and regional outages in the electric "grid", particularly during hazardous weather events, the City experiences a loss of power, which will shut down critical facilities

including sanitary pump stations that can lead to health hazard to connected properties' sewer systems and that will prevent continuity of operations.

- The City's Community Recreation Center may potentially be designated as an emergency command center/shelter, due to its location, size, and amenities, however, at this time the City does not have the Community Recreation Center designated as an emergency command center/shelter. The facility does not have back-up power to operate as an emergency facility in the event of hazards.
- The residents of the City need better resources brought to them to be made more aware of how to properly protect themselves and mitigate their property from hazards that affect the region and County.
- The Current emergency disaster plan does not address all the vulnerabilities that the hazards of concern present to the public. The information is not updated to integrate the current HMP.
- The City is reliant on a single water storage facility (i.e., elevated 200,000-gallon tank) for treated/processed potable water that supplies the City's water distribution system for water customers. The single existing elevated water storage tank is vulnerable and can have high-water demand during extreme drought conditions, which may severely reduce water storage quantity in the existing tank that could reduce water distribution pressure.
- Groveport has one repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area or are vulnerable as access to them is subject to inundation from the 1-percent chance flood event.:
 - City of Groveport Well Field
 - City of Groveport Water (production) Plant
 - Founders Bend Sanitary Pump Station
 - Bixford Green Sanitary Pump Station
 - Groveport Park Sanitary Pump Station
 - Hendron Ditch Storm Pump Station

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

Figure 9.14-5. City of Groveport Problem Area Map



9.14.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and that presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.14-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Evaluate Groveport Road at Rager Road to avoid flooding of Groveport Road	Franklin County Engineer	No Progress	Yes	Localized flooding in this area blocks emergency vehicles from providing service in this area	Franklin County Engineer This is not in Groveport it is in Madison Township
Fixed permanent emergency generators for critical facilities and sanitary sewer pump stations	Groveport City	In Progress	Yes	Loss of electric in local and regional power outages shuts down sanitary pump stations	City Engineer & Service Director
Research and secure funding for tree trimming program.	Mayor's Office	Ongoing	No	-	-
Purchase and raise frequently flooded properties on Hanstein Ditch and add property to existing City owned parkland to the east	Mayor's Office	No Progress	No	-	-
Replace bridge on Little Walnut Creek to prevent current bridge from breaking free, flowing down stream and causing flooding upstream	Mayor's Office	No Progress	Yes	This bridge is a small cable suspension bridge on the City's municipal golf course that carries golf carts and maintenance equipment across the stream. It is low and can be damaged during frequent bank-full flooding. It requires frequent repair. Replacement to elevate is critical	City Engineer
Research and secure funding to provide storm sewers on properties along Old Hamilton Road that have old collapsed tile that causes flooding.	Mayor's Office	No Progress	Yes	Flood Hazard & undersized and antiquated storm water collection	City Engineer



Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for back-up generator to the community recreation center that would be used as an emergency command center, emergency communication center and temporary housing facility for natural disasters.	Mayor's Office	No Progress	Yes	Loss of electric supply in local and regional outages would not allow use as emergency command center or temporary housing during a disaster event	City Engineer & Service Director

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Groveport identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Groveport has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Groveport participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.14-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	X	X	X	-	-	X
Disease Outbreak	X	-	-	X	X	X	X	-	-	X
Drought	X	X	-	X	X	X	X	-	-	X
Earthquake	X	X	-	X	X	X	X	-	-	X
Extreme Temp	X	X	-	X	X	X	X	-	-	X
Flood	X	X	-	X	X	X	X	-	X	X
Geologic	X	X	-	X	X	X	X	-	-	X
Invasive Species	X	-	-	X	X	X	X	-	-	-
Severe Weather	X	X	-	X	X	X	X	-	X	X
Severe Winter Weather	X	X	-	X	X	X	X	-	X	X
Tornado	X	X	-	X	X	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.14-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Groveport will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.14-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Groveport City-001	Flood Study*	<p>Problem: Bixby Road and the intersection of Groveport Road and Rager Road are subject to inundation by out-of-bank flood waters from adjacent streams that will block emergency vehicles from providing service in this area.</p> <p>Solution: Conduct an engineering study to evaluate improvement to Bixby Road and Groveport Road at Rager Road to mitigate the hazard that would result in reduced thoroughfare flooding and that will ensure emergency vehicles can access the area.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	1 Year	Franklin County Engineer	City, County, FEMA, BRIC, FMA, HMGP	Emergency Vehicles will have better access to areas blocked off by flooding at Groveport and Rager Road.	> \$50,000 for engineering	High	SIP	SP, ES
2023-Groveport City-002	Generators for Critical Facilities	<p>Problem: The City experiences a loss of electric power during local and regional power outages which shut down critical facilities including sanitary pump stations and prevent continuity of operations.</p>	Dam/Levee, Drought, Earthquake, Extreme Temperature, Flood, Geologic,	6	Less than 5 Years	Groveport City Engineer	City, County, FEMA, BRIC, FMA, HMGP	The City will have continuity of operations at critical facilities during	\$100,000	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solutions: The City will conduct an engineering study to determine correct generator sizes and will install fixed permanent emergency generators for critical facilities and sanitary sewer pump stations.	Severe Summer Weather, Severe Winter Weather, Tornado					power outages.				
2023-Groveport City-003	Bridge Replacement	Problem: The Little Walnut Creek bridge is a small cable suspension bridge on the City's municipal golf course that carries golf carts and maintenance equipment across the stream. It is low and can be damaged during frequent bank-full flooding. It requires frequent repair. Solution: The City will replace bridge over Little Walnut Creek after conducting an engineering study to prevent current bridge from breaking free, flowing down stream and causing flooding upstream.	Flood	6	5 Years	City Engineer	City, FEMA, BRIC, FMA, HMGP	The Bridge will be able to provide continuity of operations.	TBD after engineer study	High	SIP	SP
2023-Groveport City-004	Storm Sewer Installations	Problem: Properties in the City along Old Hamilton Road are consistently flooding due to collapsed infrastructure.	Flood, Severe Summer Weather, Severe Winter Weather	6	2 Years	City Engineer	City, FEMA, BRIC, FMA, HMGP	Properties along Old Hamilton Road will experience reduced flooding.	TBD after Study	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will research and conduct a storm sewer study, then will secure funding to provide correctly sized storm sewers on properties along Old Hamilton Road that have collapsed infrastructure that causes flooding.										
2023-Groveport City-005	Designate and install Generator at the Community Recreation Center	<p>Problem: The City's Community Recreation Center has potential for being designated an emergency command center/shelter. However, the facility does not have backup power to operate as a emergency facility in the event of hazards.</p> <p>Solution: The City will conduct an engineering study to determine what size generator is needed to power the Community Recreation Center. The City will seek funding for installation of a back-up generator to the community recreation center and would designate it as an emergency command center and temporary housing facility for natural disasters.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	6	4 Years	City Engineer & Service Director	City, FEMA, BRIC, FMA, HMGP	The City will have a command center and shelter that will be able to perform continuity of operations during hazard events.	>\$100,000	High	LPR	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Groveport City-006	Public Outreach	<p>Problem: The residents of the City are unaware of how to properly protect themselves and mitigate their property from hazards that affect the County.</p> <p>Solution: The City will work with the County to create informative documents and website updates to include how to prepare for and mitigate the hazards that threaten the City. The City will also work with the Ohio Sam Safety Organization to obtain up to date dam information and will work to promote and educate residents on the "StormReady" program. Additionally, the City will ensure that residents know of available shelters for hazard events.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	6 months	City Administrator, City Engineer, County Emergency Management	FEMA, HMGP, City and County	The public will be better equipped to prepare for and mitigate against the hazards of concern.	\$2,000	High	EAP	PR, PP, PI
2023-Groveport City-007	Plan Integration and Update	<p>Problem: The Current emergency disaster plan does not address all of the vulnerabilities that the hazards of concern present to the public. The information is not updated to integrate the current HMP.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species,	1	1 Year	City Administrator, Chief of Police, City Engineer	FEMA, HMGP, City	The public will be better equipped to prepare for and mitigate against the hazards of concern.	\$3,000	High	LPR	PR, PI



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will update the Plan to reflect current and projected vulnerabilities for all hazards of concern and ensure that the current HMP is integrated into the Emergency Disaster Plan.	Severe Summer Weather, Severe Winter Weather, Tornado									
2023-Groveport City-008	Supplemental Elevated Water Storage Facility	<p>Problem: The City is reliant on a single water storage facility for treated/processed water that supplies the City's water distribution system for water customers. A single tank is vulnerable and has a high-water demand during extreme drought conditions which may severely reduce water storage quantity in the existing tank that could reduce water distribution pressures.</p> <p>Solution: The City will develop/construct a supplemental elevated water storage facility that would maintain water distribution system pressures for domestic and firefighting supplies in the event that water demand is excessively high due to high heat and/or drought events.</p>	Extreme Temperature, Drought	6	4 Year	City Administration, Engineering and Service Departments	Departmental Budgets, Clean Water State Revolving Loan Fund, Drinking Water State Revolving Fund, HMGP	Water supply for domestic use and firefighting will be more reliable and consistent during drought and high heat conditions	\$1,200,000	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Groveport City-009	Flood Vulnerability Evaluation	<p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area or are vulnerable as access to them is subject to inundation from the 1-percent chance flood event:</p> <ul style="list-style-type: none"> City of Groveport Well Field City of Groveport Water (production) Plant Founders Bend Sanitary Lift Station Bixford Green Sanitary Pump Station Groveport Park Sanitary Pump Station Hendron Ditch Storm Pump Station <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p>	Flood	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	Critical facilities will be able to continue to operate and will not flood as often.	TBD after feasibility assessment	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p>										

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.14-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Groveport City-001	Flood Study*	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Groveport City-002	Generators for Critical Facilities	1	1	0	1	1	1	1	1	1	1	1	1	1	0	12	High
2023-Groveport City-003	Bridge Replacement	1	1	0	1	1	1	0	1	1	1	0	1	1	1	11	High
2023-Groveport City-004	Storm Sewer Installations	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Groveport City-005	Designate and install Generator at the Community Recreation Center	1	1	0	1	1	1	1	1	1	1	1	1	1	1	13	High
2023-Groveport City-006	Public Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Groveport City-007	Plan Integration and Update	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Groveport City-008	Supplemental Elevated Water Storage Facility	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High



Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Groveport City-009	Flood Vulnerability Evaluation	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.15 HAMILTON TOWNSHIP

This section presents the jurisdictional annex for the Hamilton Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Hamilton Township participated in the planning process, an assessment of the Hamilton Township's risk and vulnerability, the different capabilities used in the Hamilton Township, and an action plan that will be implemented to achieve a more resilient community.

9.15.1 Hazard Mitigation Planning Team

The Hamilton Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Hamilton Township departments, including Hamilton Township Fire Department . The Supervisor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.15-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Josh Marcum/Supervisor	Name/Title:	-
Address:	6400 Lockbourne Road	Address:	-
Phone Number:	614-491-3963	Phone Number:	-
Email:	-	Email:	-
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		

Method of Participation:	
--------------------------	--

9.15.2 Municipal Profile

Hamilton Township is in southern Franklin County and is bordered by Madison Township to the east, Montgomery Township to the north, Jackson Township to the west and Pickaway County to the south. Most of northern and western Hamilton Township is occupied by the city of Columbus. The villages of Lockbourne and Obetz are located in the southern and northeastern part of the township respectively.

According to the American Community Survey, the 2021 population for the Township was 8,743, a 5.85 percent increase from the 2010 Census population of 8,260. Data from the 2021 American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 18.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.15.3 Jurisdictional Capability Assessment and Integration

The Hamilton Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Hamilton Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Hamilton Township and provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.15-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	-	Franklin County	-
<i>How does this reduce risk?</i>				
Zoning/Land Use Code	Yes	-	Franklin County	-
<i>How does this reduce risk?</i>				
Subdivision Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	Yes	Franklin County Zoning	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	Yes	City of Columbus	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Hamilton Township Fire Department	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	2021 Comprehensive Plan Obetz & Hamilton Township Community Plan Southwest Area Plan Clinton-Mifflin Land Use Plan	Local and County	Warren County Regional Planning Commission
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
The Hamilton Township Comprehensive Plan is straightforward and includes a Future Land Use Map (FLUM) that Township officials can use to determine if a request for zoning change fits with the overall vision for the Township. The previous Hamilton Township Comprehensive Plan was adopted in 2009; however, the Future Land Use Map has been updated periodically since then (Warren County Regional Planning Commission 2021).				
Capital Improvement Plan	No	-	-	-
How does this reduce risk?				
Disaster Debris Management Plan	No	-	-	-
How does this reduce risk?				
Floodplain Management or Watershed Plan	Yes	Hamilton Township NPDGS	-	-
How does this reduce risk?				
Stormwater Management Plan	Yes	Hamilton Township NPDGS	-	-
How does this reduce risk?				
Open Space Plan	No	-	-	-
How does this reduce risk?				
Urban Water Management Plan	No	-	-	-
How does this reduce risk?				
Habitat Conservation Plan	No	-	-	-
How does this reduce risk?				
Economic Development Plan	No	-	-	-
How does this reduce risk?				
Shoreline Management Plan	No	-	-	-
How does this reduce risk?				
Community Wildfire Protection Plan	Yes	Hamilton Township Fire Department	-	-
How does this reduce risk?				
Community Forest Management Plan	No	-	-	-
How does this reduce risk?				
Transportation Plan	No	-	-	-
How does this reduce risk?				
Agriculture Plan	No	-	-	-
How does this reduce risk?				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
How does this reduce risk?				
Tourism Plan	No	-	-	-
How does this reduce risk?				
Business/ Downtown Development Plan	No	-	-	-
How does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Hamilton Township to oversee and track development.

Table 9.15-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Franklin County Economic Development and Planning department issues development permits
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	N/A	Floodplain
Do you have a buildable land inventory? • If yes, please describe	N/A	-
Describe the level of build-out in your jurisdiction.	N/A	

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Hamilton Township and their current responsibilities that contribute to hazard mitigation.

Table 9.15-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	Yes	<p>Board of Zoning Appeals (BZA) - The BZA is responsible for reviewing variance requests, conditional uses and challenges to the zoning administrator's decisions on the interpretation of the Hamilton Township Zoning Code. The BZA is comprised of five members and one alternate member. Each member is appointed by the Trustees for a staggered term of five years.</p> <p>Zoning Commission - The Zoning Commission makes recommendations on zone change requests and site plans, as well as text amendments to the Hamilton Township Zoning Code.</p>
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Hamilton Township Public Works Department's primary function is to maintain roads and right-of-ways for Hamilton Township. This department reports directly to the Hamilton Township Board of Trustees.</p> <p>Ohio Department of Transportation.</p>
Construction/Building/Code Enforcement Department	Yes	Franklin County Zoning
Emergency Management/Public Safety Department	Yes	Fire Department
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Road Department to a point
Mutual aid agreements	Yes	Fire Department/Road Department help municipal office
Human Resources Manual	No	<p>Consider the following:</p> <p>Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?</p>
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	<p>Consider the following:</p> <p>Are data and maps from the HMP used to support documentation in grant applications?</p>
Resilience Officer	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Hamilton Township.

Table 9.15-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Hamilton Township.

Table 9.15-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	Yes	Hamilton Township Fire Department
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Hamilton Township.

Table 9.15-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.15-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.15.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Hamilton.

**Table 9.15-9. NFIP Summary**

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Hamilton (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Hamilton Township.

Table 9.15-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none">Do you maintain a list of properties that have been damaged by flooding?	The park floods along the creek
<ul style="list-style-type: none">Do you maintain a list of property owners interested in flood mitigation?How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none">If so, state what projects are underway.	No
<ul style="list-style-type: none">How do you make Substantial Damage determinations?How many were declared for recent flood events in your jurisdiction?	Depending on cost None
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none">If there are mitigated properties, how were the projects funded?	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none">If not, state why.	No we don't have any
NFIP Compliance	
What local department is responsible for floodplain management?	Road Department (Not sure)
Are any certified floodplain managers on staff in your jurisdiction?	Road superintendent (Not sure)
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none">If so, what type of assistance/training is needed?	Yes
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	We use Franklin County Engineers for our source
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	-
What are the barriers to running an effective NFIP program in the community, if any?	None

NFIP Topic	Comments
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	-
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	-
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	-
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	N/A

9.15.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Franklin County is responsible for development in the Township and issues permits for new development. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

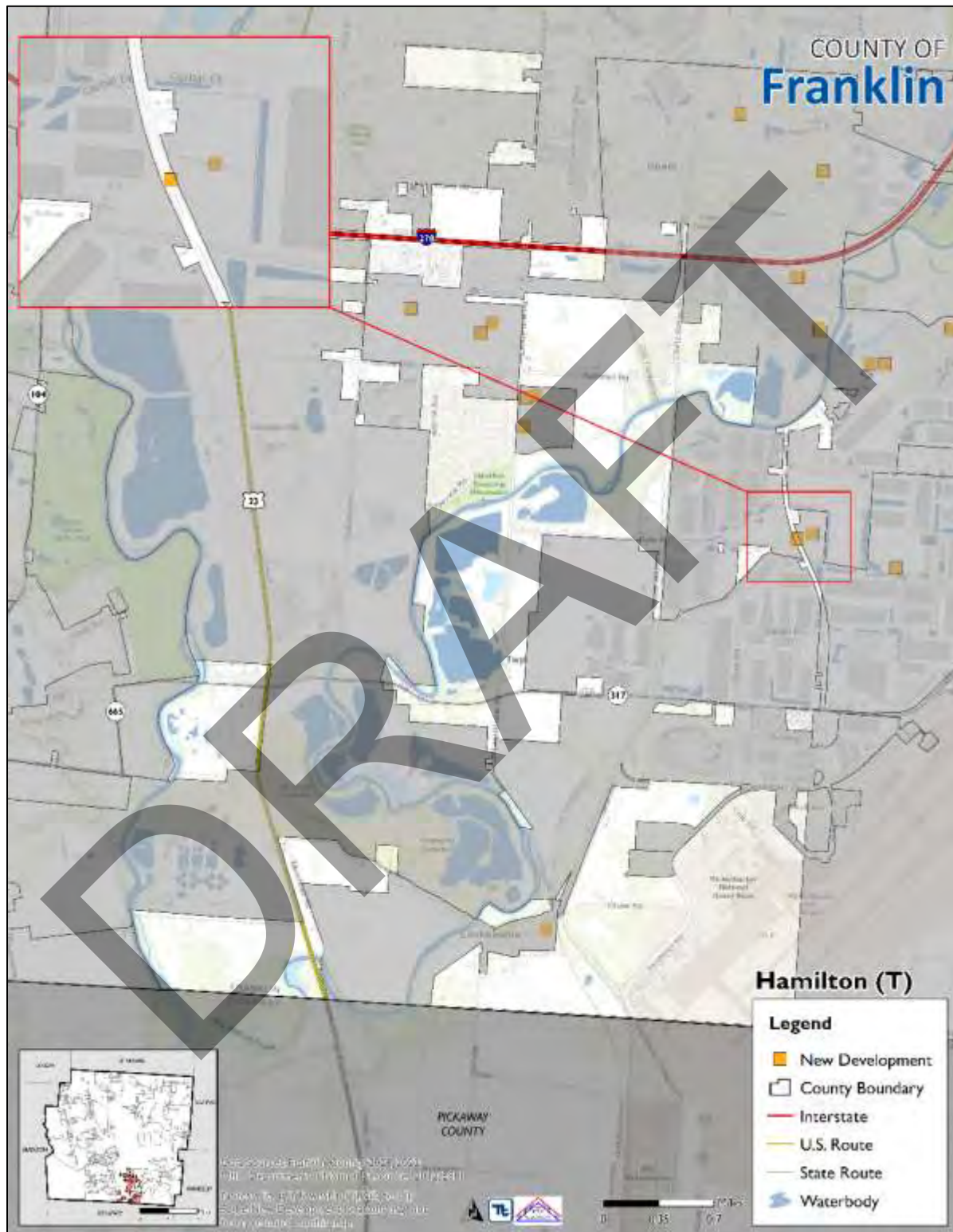
Table 9.15-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.15-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Figure 9.15-1. Proposed New Development in the Jurisdiction



9.15.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Hamilton Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Hamilton Township has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.15-2. Hamilton Township Hazard Area Extent and Location Map

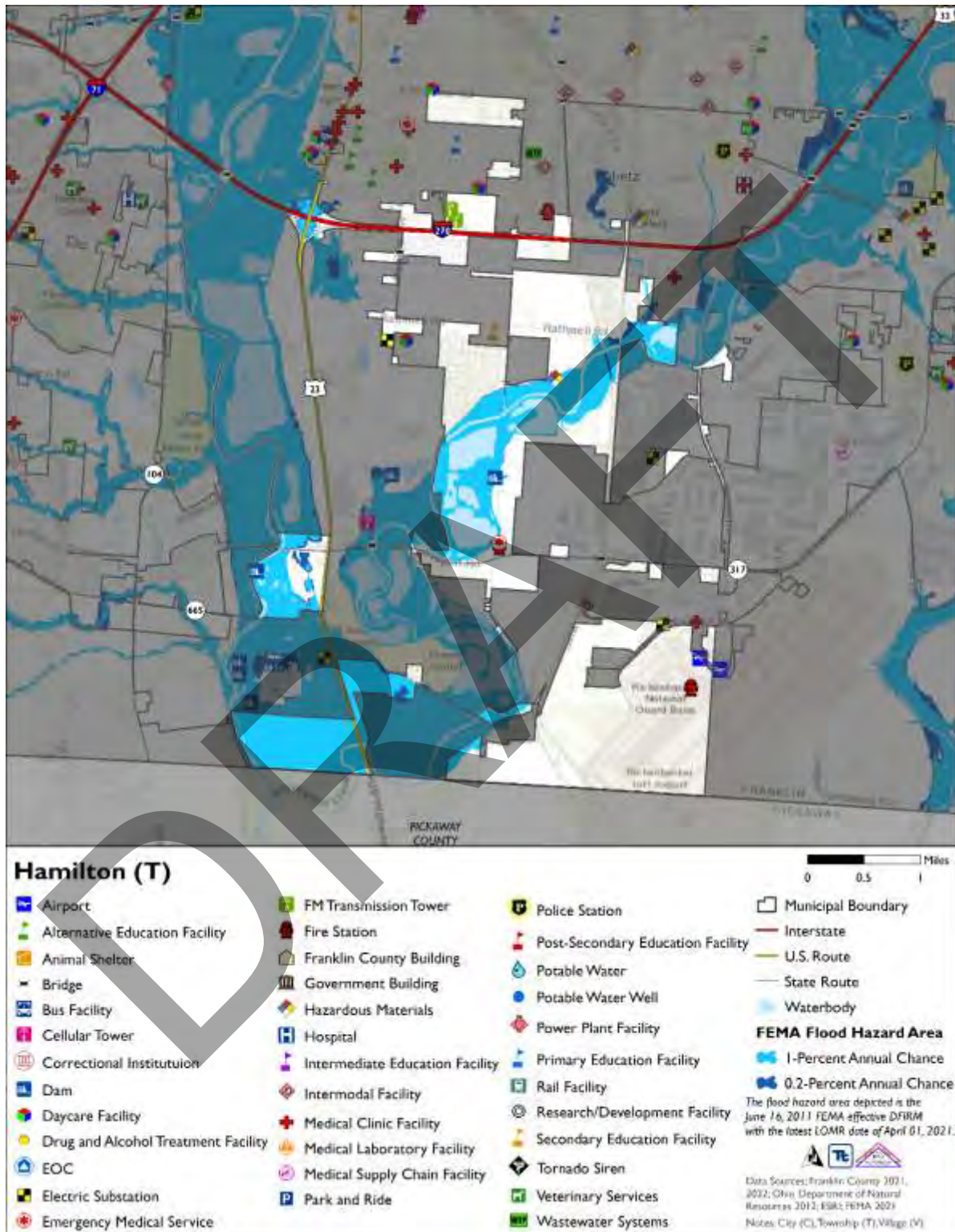


Figure 9.15-3. Hamilton Township Hazard Area Extent and Location Map

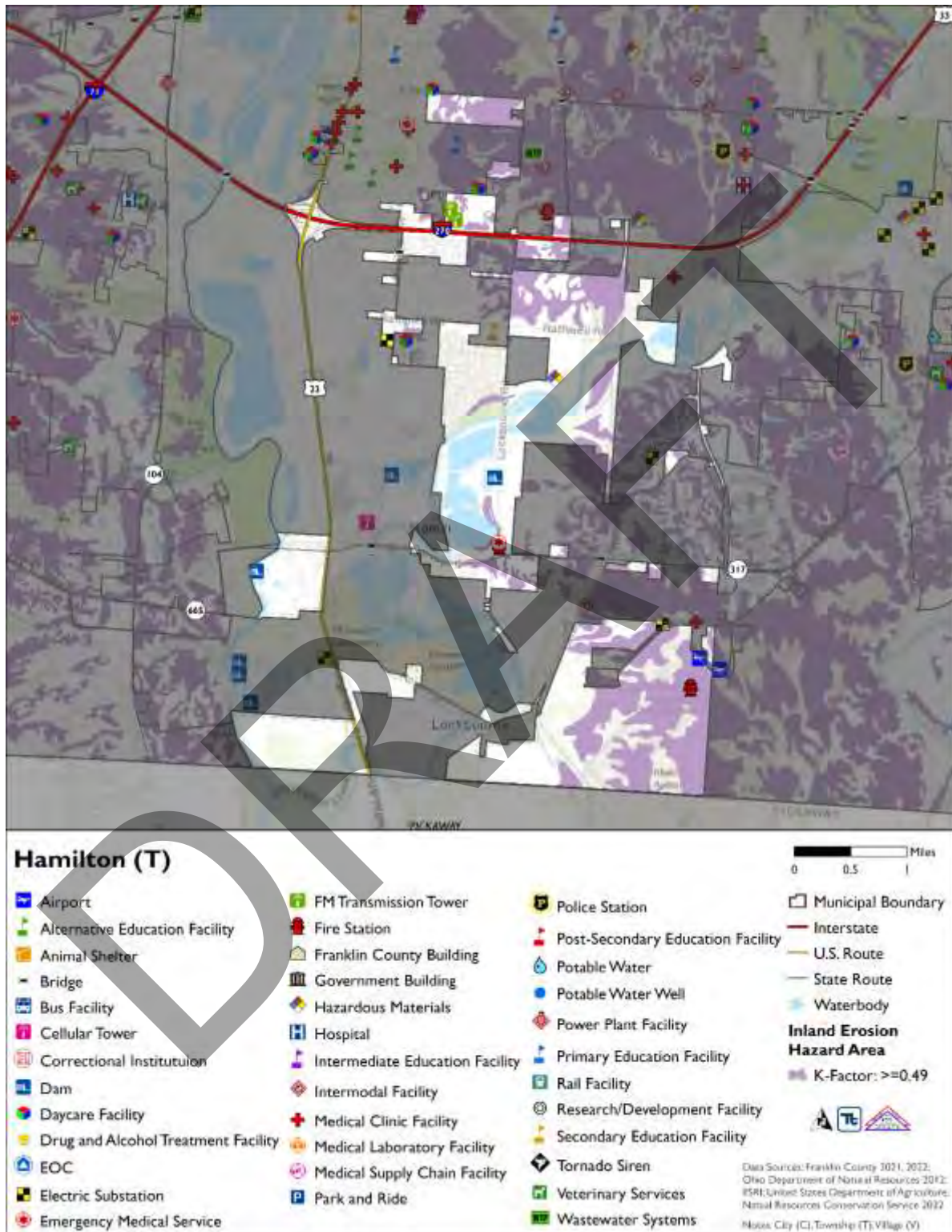
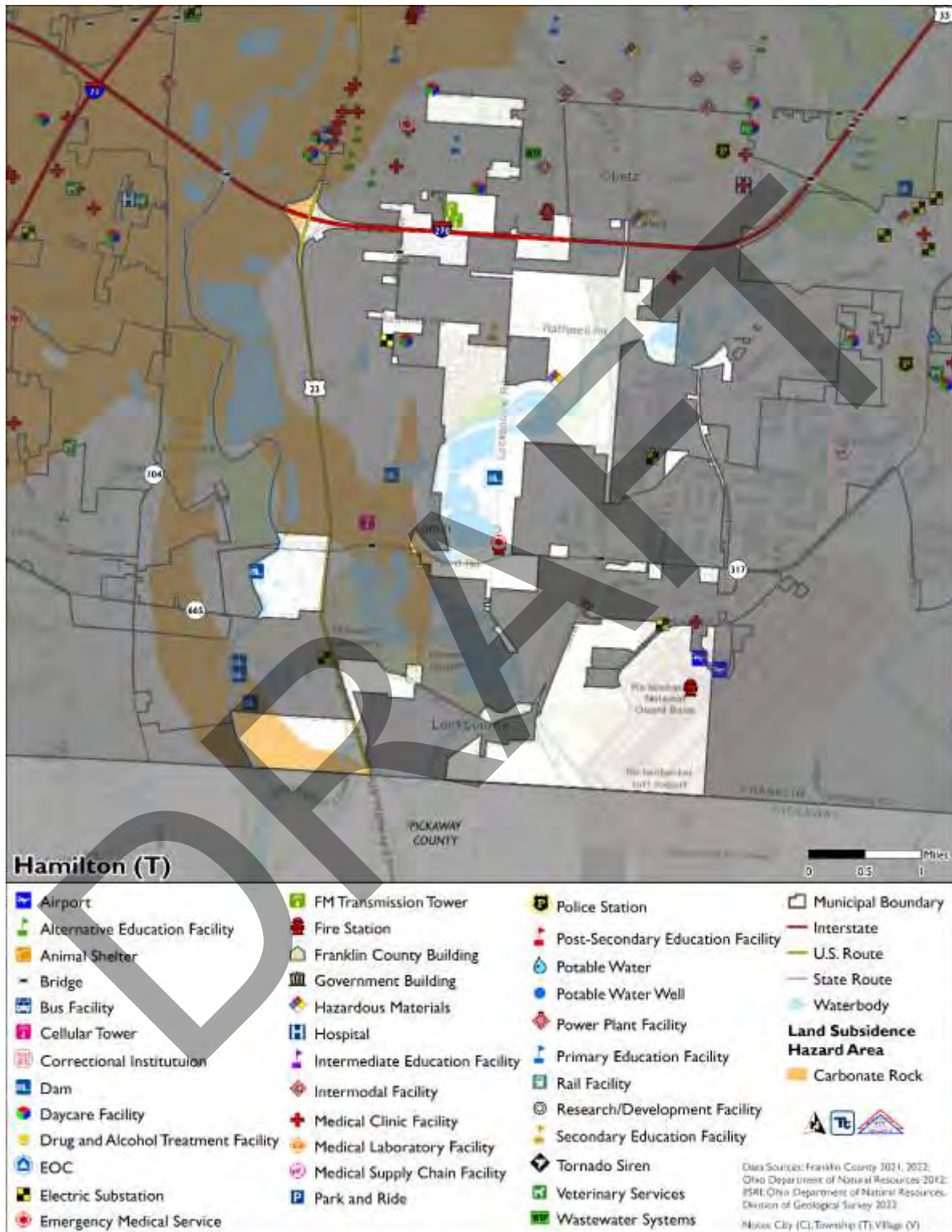


Figure 9.15-4. Hamilton Township Hazard Area Extent and Location Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Hamilton Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Hamilton Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.15-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Hamilton Township.

The Hamilton Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Hamilton Township agreed with all of the following hazard risk rankings.

Table 9.15-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.15-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Hamilton Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	3	3
0.2-Percent Annual Chance Flood Event Hazard Area	3	3
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	4	4
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	3	3
Delaware Dam Inundation (MH Breach) Hazard Area	1	1

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Township of Hamilton identified the following vulnerabilities within its community:

- The Township does not have a method to ensure that residents with functional needs are properly cared for in emergency situations including the hazards of concern.
- The Township does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern

9.15.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.15-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities.	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR)	Complete – the Township implemented a rain garden in 2018	-	-	-
Reconnect 150 linear feet of Dysart Run to the floodplain and stabilize 3 sections of bank with severe erosion to reduce erosion and siltation	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR)	Complete – the County Engineers office straightened and formed an open ditch line to the creek and grass shed at the park in 2022	-	-	-
Increase stormwater retention/detention features along waterways like, Holcomb Ditch, to reduce and/or slow the flow of stormwater.	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR)	Complete – the County Engineers office straightened and formed an open ditch line to the creek and grass shed at the park in 2022	-	-	-
Development of a plan and strategy to ensure residents with functional needs are properly cared for in an emergency.	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County social service agencies	No Progress	Yes	There were no written action as to how functional needs individuals would be transported to shelters or evacuated from the country	The American Red cross and COTA will have available resources for all individuals

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for back-up generators for critical public buildings and infrastructure.	Franklin County Emergency Management & Homeland Security • All 41 jurisdictions	In Progress - This is still underway with the implementation of the Franklin County Climate change plan	-	-	-

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Hamilton Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Hamilton Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.15-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	-	-	X	-	-	X
Disease Outbreak	X	-	-	X	-	-	X	-	-	X
Drought	X	-	-	X	-	-	X	-	-	X
Earthquake	X	-	-	X	-	-	X	-	-	X
Extreme Temp	X	-	-	X	-	-	X	-	-	X
Flood	X	-	-	X	-	-	X	-	-	X
Geologic	X	-	-	X	-	-	X	-	-	X
Invasive Species	X	-	-	X	-	-	X	-	-	X
Severe Summer Weather	X	-	-	X	-	-	X	-	-	X
Severe Winter Weather	X	-	-	X	-	-	X	-	-	X
Tornado	X	-	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.15-17).

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Hamilton Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.15-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Hamilton Township-001	Functional Needs during Emergency	<p>Problem: The Township does not have a method to ensure that residents with functional needs are properly cared for in emergency situations including the hazards of concern.</p> <p>Solution: The Township will develop a plan and strategy to ensure that residents with functional needs are properly cared for in an emergency.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	3 years	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County social service agencies	Township Budget	Residents with functional needs will be better protected.	Staff Time	High	LPR, EAP	ES
2023-Hamilton Township-002	Continuity of Operations Plan	<p>Problem: The Township does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern.</p> <p>Solution: The Township will develop a Continuity of Operations Plan that will address the hazards of concern.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	1 Year	Township Administration	Township Budget	The Township will be better prepared to perform continuity of operations after a hazard event.	Staff Time	High	LPR	PI

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

**Acronyms and Abbreviations:**

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.15-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023- Hamilton Township-001	Functional Needs during Emergency	1	0	1	1	1	1	1	0	1	1	1	1	0	1	11	High
2023- Hamilton Township-002	Continuity of Operations Plan	1	1	1	1	1	1	1	0	1	1	1	1	1	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.16 VILLAGE OF HARRISBURG

This section presents the jurisdictional annex for the Village of Harrisburg that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Harrisburg participated in the planning process, an assessment of the Village of Harrisburg's risk and vulnerability, the different capabilities used in the Village of Harrisburg, and an action plan that will be implemented to achieve a more resilient community.

9.16.1 Hazard Mitigation Planning Team

The Village of Harrisburg identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village of Harrisburg departments. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.16-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Michael Lytle/Mayor	Name/Title:	-
Address:	1040 W. Franklin Street, Kenton, OH, 43326	Address:	-
Phone Number:	419-674-2222	Phone Number:	-
Email:	mlytle@harrisburgoh.com	Email:	-
NFIP Floodplain Administrator			
Name/Title:	Michael Lytle/Mayor		
Address:	1040 W. Franklin Street, Kenton, OH, 43326		
Phone Number:	419-674-2222		
Email:	mlytle@harrisburgoh.com		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.16.2 Municipal Profile

The Village of Harrisburg is in northern Franklin County and is bordered by the City of Worthington to the southwest. The Village is surrounded by Sharon Township as well as the outskirts of Columbus City. The City is located to the west of Rush Run Creek.

According to the American Community Survey, the 2021 population for the Village of Harrisburg was 376, a 17.5 percent increase from the 2010 Census population of 320. Data from the 2021 American Community Survey indicates that 4.3 percent of the population is 5 years of age or younger and 26.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.16.3 Jurisdictional Capability Assessment and Integration

The Village of Harrisburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

The Village of Harrisburg is a small community with minimal capabilities. The following provides information regarding the Village's current capabilities.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Harrisburg and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.16-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Building Code & Residential Code of Ohio	County	Authority for adopting is Franklin County Board of



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
				Commissioners. Administered by Economic Development & Planning Department (EDP)
<p><i>How does this reduce risk?</i></p> <p>Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1- 2-, and 3-family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to county building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, mechanical and planning uses. The Residential code gives builders a pre-identified checklist prior to construction leading to safer actions to accomplish goals.</p> <p>The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. Any projects in Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon, and Truro townships must apply for a Certificate of Zoning Compliance through the Franklin County EDP. Homeowners and/or building contractors are required to obtain a zoning compliance from the townships of Blendon, Canal Winchester, Jackson, Jefferson, Perry, Plain, Prairie, or Washington and then apply to the County Building Department for the building permit. In the villages of Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview, homeowners and building contractors are required to obtain a zoning compliance from the village and apply to the Department for the building permit. Groveport and Obetz will issue both the zoning compliance and the building permits.</p>				
Zoning/Land Use Code	-	-	-	-
<i>How does this reduce risk?</i>				
Subdivision Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	-	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	-	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	-	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	-	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Climate Change Ordinance	-	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Planning Documents				
Comprehensive/Master Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	-	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	-	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	-	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	-	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Harrisburg to oversee and track development.

Table 9.16-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	This is performed at the county level.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	This is performed at the county level.
Do you have a buildable land inventory? • If yes, please describe	No	This is performed at the county level.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Harrisburg and their current responsibilities that contribute to hazard mitigation.

Table 9.16-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Harrisburg.

Table 9.16-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Harrisburg.

Table 9.16-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	The Village has a social media page that they share importation information with their residents.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Harrisburg.

Table 9.16-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.16-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.16.4 National Flood Insurance Program Compliance

While the Village of Harrisburg does not participate in the NFIP, they provided input on their flood vulnerabilities.

NFIP Statistics

The Village does not participate in the NFIP; therefore, NFIP statistics are not available.

NFIP Summary

The following table provides a summary of NFIP information for the Village of Harrisburg.

Table 9.16-9. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	The park floods along the creek
<ul style="list-style-type: none"> • Do you maintain a list of properties that have been damaged by flooding? 	
<ul style="list-style-type: none"> • Do you maintain a list of property owners interested in flood mitigation? 	No
<ul style="list-style-type: none"> • How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	

NFIP Topic	Comments
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. 	
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Depending on cost None
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	None
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	No we don't have any
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Road Department (Not sure)
Are any certified floodplain managers on staff in your jurisdiction?	Road superintendent (Not sure)
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	We use Franklin County Engineers for our source
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).
What are the barriers to running an effective NFIP program in the community, if any?	Not sure
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	Not sure
<ul style="list-style-type: none"> If so, state the violations. 	
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	N/A
Does your floodplain management program meet or exceed minimum requirements?	Meets
<ul style="list-style-type: none"> If exceeds, in what ways? 	
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	N/A

NFIP Topic	Comments
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Not sure

9.16.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

Table 9.16-10. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.16-11. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

9.16.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Harrisburg's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Harrisburg has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.16-1. Village of Harrisburg Hazard Area Extent and Location Map



Figure 9.16-2. Village of Harrisburg Hazard Area Extent and Location Map

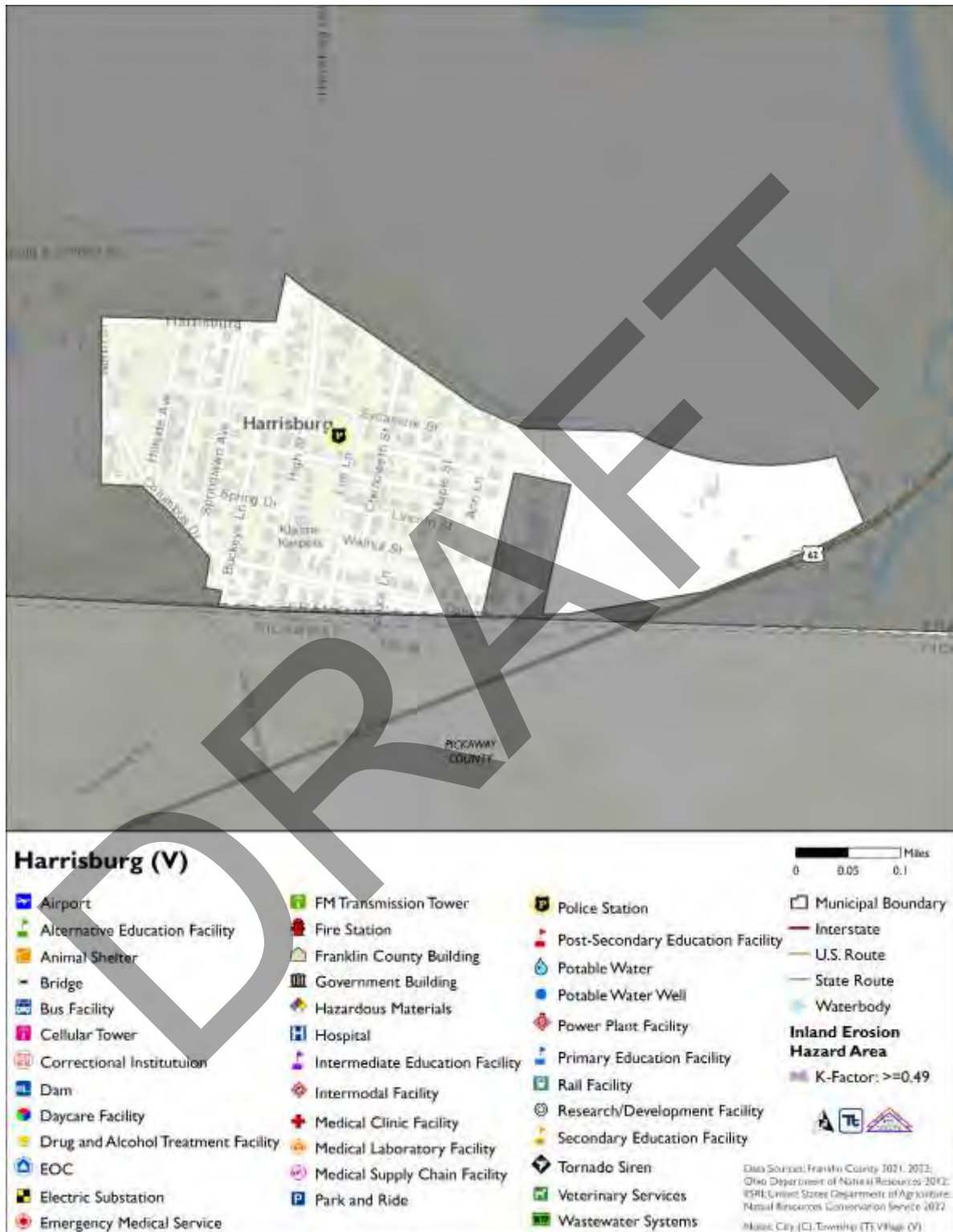
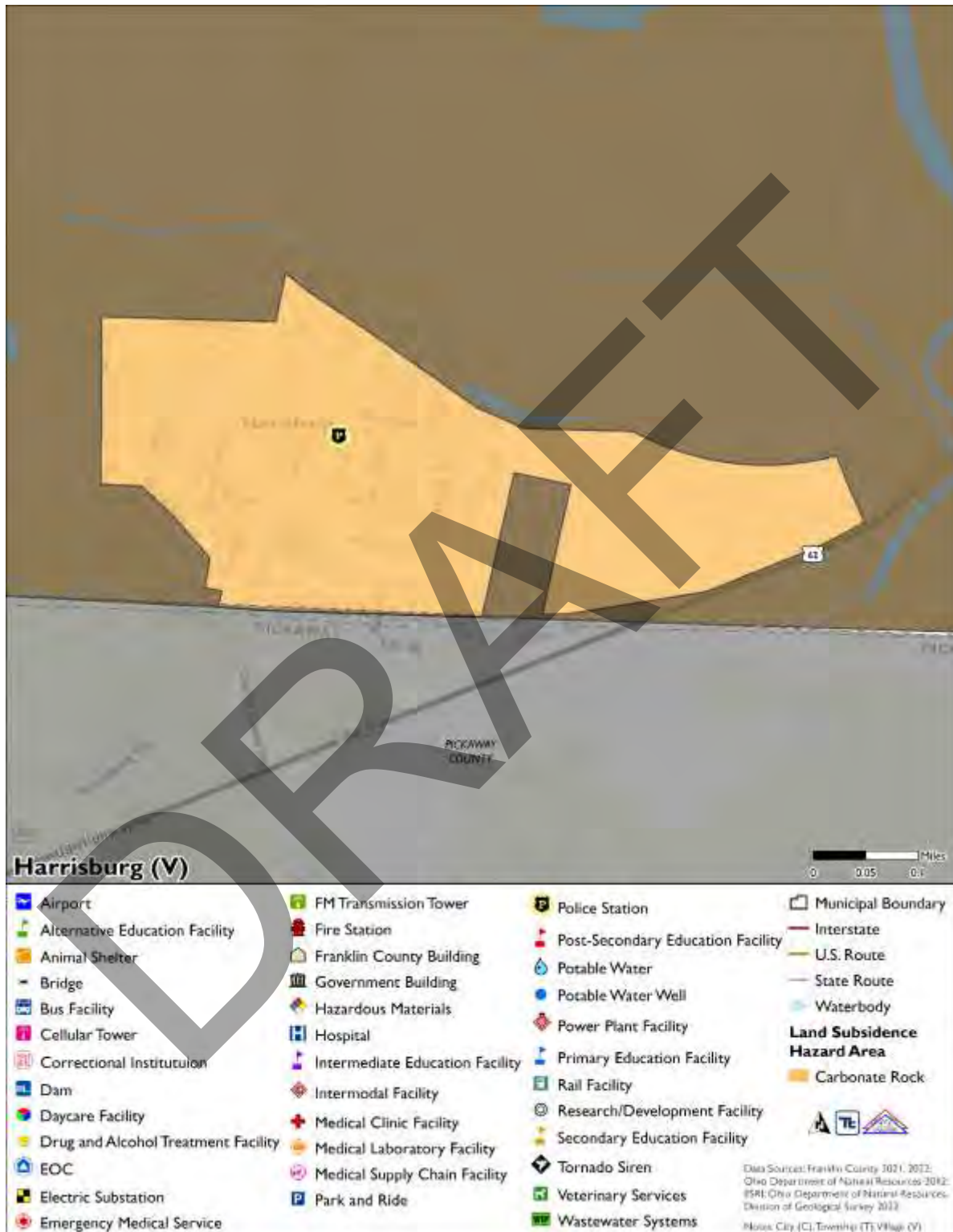


Figure 9.16-3. Village of Harrisburg Hazard Area Extent and Location Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Harrisburg's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Harrisburg experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.16-12. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Village did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Village did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of

Harrisburg. The Village of Harrisburg reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.16-13. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.16-14. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Harrisburg

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	1	1
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

Springwater Run Creek will flood the park which borders the waterway.

9.16.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.16-15. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (1500 / 3 months)	Village Administration and Mayor's office	-	-	-	-
Purchase Tornado Sirens through Franklin County Emergency Management & Homeland Security. (60,000 / 4 months)	Village Administration and Mayor's office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Harrisburg identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Village of Harrisburg has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.16-16. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee				X			X			X
Disease Outbreak				X			X			X
Drought				X			X			X
Earthquake				X			X			X
Extreme Temp				X			X			X
Flood		X		X			X		X	X
Geologic				X			X			X
Invasive Species				X			X			X
Severe Summer Weather				X			X			X
Severe Winter Weather				X			X			X
Tornado				X			X			X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.16-16)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Harrisburg will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.16-17. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Harrisburg-01	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Village.</p> <p>Solution: Work with Franklin County EM&HS to provide residents of Harrisburg Village with the necessary information to protect themselves and understand the threats of all hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS, Harrisburg Council	HMGP, Local Funding	High	Low	High	EAP	PI
2023-Harrisburg-02	Alert Franklin County Campaign	<p>Problem: Although there are notification methods in place, Village residents may not be informed of the Franklin County text alerts for hazards.</p> <p>Solution: Along with Franklin County EM&HS, assist with the promotion of the text alert</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood,	4,5	2 years	Franklin County EM&HS, Harrisburg Council	HMGP, Local Funds	High	Low	High	EAP	ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		system so residents can stay informed and aware of any impending hazards.	Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes									
2023-Harrisburg-03	Spring Water Run Flood Mitigation Measures	Problem: The park in town becomes inundated with flood waters from Spring Water Creek. Solution: Investigate methods to mitigate flooding from Spring Water Creek, which inundates the Park and portions of Harrisburg Pike. Such methods may include structural projects like floodwalls and retaining walls, or natural protections including corridor restoration, erosion control, and stream management.	Flood	3, 4, 6	2 to 3 years	Harrisburg Council	BRIC, HMGP, Local Funding	Medium	Medium	High	SIP	SP

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- **Local Plans and Regulations (LPR)**—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- **Structure and Infrastructure Project (SIP)**—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- **Natural Systems Protection (NSP)**—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- **Education and Awareness Programs (EAP)**—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- **Preventative Measures (PR)**—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- **Property Protection (PP)**—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- **Public Information (PI)**—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- **Natural Resource Protection (NR)**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Structural Flood Control Projects (SP)**—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Emergency Services (ES)**—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.16-18. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	All-Hazards Education Campaign	1	0	1	1	1	1	1	0	1	1	1	1	0	0	10	High
	Alert Franklin County Campaign	1	0	1	1	1	1	1	0	1	0	1	1	0	0	9	High



	Locke Meadow Park Flood Mitigation Measures	1	1	1	1	0	1	1	1	0	1	0	1	0	0	9	High
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	------

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

DRAFT

SECTION 9. JURISDICTIONAL ANNEXES

9.17CITY OF HILLIARD

This section presents the jurisdictional annex for the City of Hilliard that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Hilliard participated in the planning process, an assessment of the City of Hilliard's risk and vulnerability, the different capabilities used in the City of Hilliard, and an action plan that will be implemented to achieve a more resilient community.

9.17.1 Hazard Mitigation Planning Team

The City of Hilliard identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Hilliard departments. The City Manager represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.17-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Michelle Crandall, City Manager	Name/Title:	Sandi Hopkins, Administrative Assistant
Address:	3800 Municipal Way, Hilliard, OH 43026	Address:	3800 Municipal Way, Hilliard, OH 43026
Phone Number:	614-876-7361	Phone Number:	614-876-7361
Email:	mcrandall@hilliardohio.gov	Email:	SHopkins@hilliardohio.gov
NFIP Floodplain Administrator			
Name/Title:	Clark Rausch/City Engineer		
Address:	3800 Municipal Way, Hilliard, OH, 43026		
Phone Number:	614-876-7361		
Email:	-		
Additional Contributors:			
Name/Title:	Jeanne Amicon, Permit Tech, Building Standards Division, Community Development Department		
Method of Participation:	Provided key input in the planning process.		
Name/Title:	Dan Ralley		
Method of Participation:	Provided key input in the planning process.		
Name/Title:	Ron Clark		
	Provided key input in the planning process.		

Method of Participation:	
--------------------------	--

9.17.2 Municipal Profile

The City of Hilliard is in the northwest corner of Franklin County. Located 14 miles northwest of downtown Columbus, the City of Hilliard is known for its extensive park system, paved scenic bike trails, one-of-a-kind museums, home-grown cultural and historical offerings, unique dining, and special events. The City of Hilliard has a total area of 13.34square miles, 13.17 square miles of land and 0.17 square miles of water.

According to the U.S. Census, the 2020 population for the City of Hilliard was 37,132, a .6 percent decrease from the 2010 Census population. Data from the 2020 U.S. Census indicate that 5.8 percent of the population is 5 years of age or younger and 10.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.17.3 Jurisdictional Capability Assessment and Integration

The City of Hilliard performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Hilliard to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Hilliard and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.17-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Chapter 1301, November 1, 2017	Local	Hilliard
<i>How does this reduce risk?</i> When specifications and drawings submitted are found to conform to the requirements of the OBC, RCO, OMC, or the Zoning Code of the City, the Building Standards Director/CBO or designee shall issue a permit. One copy of such stamped specification and plans shall be made available to the applicant and shall be kept at the site of the proposed work through its construction period.				
Zoning/Land Use Code	Yes	1102, February 25, 2019	Local	Hilliard
<i>How does this reduce risk?</i> The purpose of this Zoning Code is to promote the public health, safety, morals, comfort and general welfare of the City and its residents; to conserve and preserve the value of property; to facilitate the provision of roads, public utilities, water, sewerage, parks, and other public requirements; and decrease or avoid congestion on public streets and highways.				
Subdivision Ordinance	Yes	1188, 1115.04 Big Darby Accord	Local	Community Development
<i>How does this reduce risk?</i> In their interpretation and application, the provisions of these Subdivision Regulations shall be held to be the minimum requirements adopted for the protection of the public health, safety and welfare. To protect the public among other purposes, such provisions are intended to provide for a permanently wholesome community environment, adequate public services and safe streets and highways.				
Site Plan Ordinance	Yes	1130, October 27, 2014	Local	Community Development
<i>How does this reduce risk?</i> The purpose of this chapter is to establish a uniform set of requirements for the planning and design of developments within the City in order to achieve the following objectives: (a) To determine compliance with the provisions of this code; (b) To promote the orderly development of the City; (c) To prevent depreciation of land values; (d) To ensure a consistent level of quality throughout the community; (e) To ensure a harmonious relationship between new development and the existing natural and manmade surroundings; (f) To achieve the goals and principles of the City of Hilliard Comprehensive Plan; (g) To promote consultation and cooperation between applicants and the City in order that applicants may accomplish their objectives in the utilization of land, consistent with the public purposes of this code and the comprehensive plan.				
Stormwater Management Ordinance	Yes	Chapter 951, December 21, 2009	Local	Community Development
<i>How does this reduce risk?</i> The purpose of the Stormwater Management provision contained in this chapter and other related provisions contained elsewhere in the Code is to provide for effective management and financing of a stormwater system within the City of Hilliard.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	Yes	1115.04 Big Darby Accord	Local	Community Development
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	Yes	951, 1115.04 Big Darby Accord	Local	Community Development
<i>How does this reduce risk?</i> The primary mission of the Accord is to preserve, protect and improve the Big Darby Watershed's unique ecosystem, and to promote responsible growth within environmentally sensitive areas. The Hilliard Conservation District is created to promote the general public				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
welfare, encourage the efficient use of land and resources, promote greater efficiency in public utility services, and encourage innovation in the planning and building of all types of development.				
Flood Damage Prevention Ordinance	Yes	Chapter 1305.05, October 11, 2021	Local	Community Development
<i>How does this reduce risk?</i> A development permit shall be obtained from the City Engineer before construction or development begins within any area of special flood hazard.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Planning Documents				
Comprehensive/Master Plan	Yes	Southwest Area Plan Clinton-Mifflin Land Use Plan	Local	Planning Department
<i>How does this reduce risk?</i> In 2021, the City of Hilliard launched a process called Hilliard by Design to create a major update to the city's 2011 Comprehensive Plan. The process led to a bold vision, a series of big ideas, goals, and actions that are based on the values, needs, and aspirations of the community. This plan sets the direction for the city's growth and development and serves as a guide for decision-makers and the community for future development and many aspects of our city's quality of life.				
Capital Improvement Plan	Yes	2023-2027	Local	Hilliard
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	July 21, 2022	Local	Hilliard
<i>How does this reduce risk?</i> The City of Hilliard is required to prepare a stormwater management program (SWMP) in accordance with 40 CFR 123.25 and Ohio law (OAC 3745-39). This document outlines the City's program to develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System (NPDES) Phase II program.				
Open Space Plan	Yes	September 10, 2015	Local	Hilliard Administration
<i>How does this reduce risk?</i> Examines in greater detail, the specific needs of the City's existing and future parks and public spaces to best serve City residents.				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	Yes	1115.04 Big Darby Accord	Local	Hilliard
<i>How does this reduce risk?</i> Citizens receive a wide range of benefits from trees and urban forests, including recreational opportunities, energy conservation, protection from sun and heat, improved stormwater management, enhanced animal and plant biodiversity, increased property values, and more.				
Economic Development Plan	Yes	2022	Local	Hilliard
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Hilliard boasts an educated workforce and developmental opportunities. The Ohio State University, Capital University, Franklin University, Otterbein University, and more are all within a short commute. The plan evaluates economic opportunities in the City.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	Yes	September 12, 2022	Local	Hilliard
<i>How does this reduce risk?</i> Each fall, the City develops and updates this plan based on fiscal constraints and City Council priorities. All new projects in the 2022-2026 CIP have components that address safety needs, such as roundabouts (mostly single lane), crosswalk improvements, medians, and installation of shared-use path and sidewalks.				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Hilliard to oversee and track development.

Table 9.17-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Community Development
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain layer in GIS tied to permitting
Do you have a buildable land inventory? • If yes, please describe	N/A	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Hilliard and their current responsibilities that contribute to hazard mitigation.

Table 9.17-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Planning and Zoning Commission is composed of seven Hilliard citizens who serve four-year terms. P&Z advises on land use, planning issues, and proposed zoning code amendments. It also reviews zoning requests, conditional use requests, plats, development plans, and requests for sign variances.
Zoning Board of Adjustment	Yes	The Board of Zoning Appeals consists of seven members who serve five-year City Council appointments. The board rules on variances to the City's zoning code, such as setbacks for decks and fences.
Planning Department	Yes	The Planning Division prepares staff reports concerning development applications and presents to the Planning and Zoning Commission and the Board of Zoning Appeals, and occasionally attends Council meetings to discuss zoning and development proposals. Those looking for building permit applications, property inspections, sign and fence permits, or to report a zoning violation should contact the Planning Division.
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	The Environmental Sustainability Commission reviews existing environmental policies and practices. The ESC advises City Council and other City officials on programs that help Hilliard reach its sustainability goals. Other responsibilities include reviewing environmental trends affecting the community, determining community priorities, and helping other City boards and commissions determine if new proposals comply with sustainability goals.
Open Space Board/Committee	Yes	The committee will provide recommendations and advice on a variety of topics, including development of existing parkland; recreational facilities; trails and bikeways; health, wellness, and recreational programming; and updates to strategic plans. Major topics to be considered will include the future Community Center and the development of athletic fields and other park amenities.
Economic Development Commission/Committee	Yes	Hilliard's Finance Department pays the City's bills, issues debt, collects income tax through the Regional Income Tax Agency (RITA) and prepares the

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		operating budget, capital improvements budget, and Comprehensive Annual Financial Report. The finance director is the City's fiscal officer, oversees the department, and serves as a financial advisor on municipal affairs for Hilliard's City Council and city manager.
Public Works/Highway Department	Yes	<p>The Transportation and Mobility Division is responsible for transportation planning, traffic engineering, traffic safety, administration of capital transportation projects and programs, and transportation asset management programs. The Division provides services such as:</p> <ul style="list-style-type: none"> • Development and implementation of traffic, mobility, and safety studies and plans • Management of capital transportation projects such as intersection improvements, new streets, and roundabouts from design through construction • Engineering oversight of traffic control devices, including traffic signals, traffic signs, pavement markings, pedestrian crosswalk beacons, and school zone flashing lights • Administration of annual transportation asset management programs in the public rights-of-way or easements, including the street maintenance and rehabilitation program, the sidewalk maintenance and repair program, and ADA compliance • Administration of the City's Neighborhood Traffic Calming program
Construction/Building/Code Enforcement Department	Yes	The Engineering Division is dedicated to assuring conformance to all engineering, development and planning standards for new developments in the City. Engineering provides services such as plan review for capital utility projects (storm sewer, sanitary sewer, and water lines) and private development engineering plans; administration and management of capital improvement programs pertaining to City owned utility infrastructure; issuance and inspection of all public right-of-way permits; administration of professional service and construction contracts for capital improvement projects pertaining to City utilities; construction inspection for all private development and public improvement projects; management of all City construction records; and all engineering and planning functions required by the City.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Hilliard residents are urged to sign up for a new emergency communications tool, Smart911, which gives those who answer local 911 calls vital information to share with other first responders.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stormwater Maintenance
Mutual aid agreements	No	-
Human Resources Manual	Yes	Hilliard's Human Resources Department provides assistance, support and direction on employee recruitment and compensation, labor relations and collective bargaining, disciplinary and grievance hearings, work rules and policies, citywide safety and training programs as well as employee appraisals and development. The department also oversees regulatory compliance under various federal and state laws.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	9 – engineers, construction inspectors, building inspectors

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Planners or engineers with an understanding of natural hazards	Yes	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	2 – GIS staff
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	Consider the following: Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community? Engineering Staff review plans-Engineers specialize in stormwater.		

Fiscal Capability

The table below summarizes financial resources available to the City of Hilliard.

Table 9.17-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Hilliard.

Table 9.17-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	-	-
Personnel skilled or trained in website development	-	-

Outreach Resources	Available? (Yes/No)	Comment:
Hazard mitigation information available on your website	Yes	-
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	Franklin County-use for tornado and winter weather
Natural disaster/safety programs in place for schools	Yes	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Website and Facebook

Community Classifications

The table below summarizes classifications for community programs available to the City of Hilliard.

Table 9.17-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.17-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.17.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Hilliard.

Table 9.17-9. NFIP Summary

Policies in Force	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b
14	4	\$2,387.83	0	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Hilliard.

Table 9.17-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No list. Floodplain areas shown on GIS.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the

NFIP Topic	Comments
	structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Community Development
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review & issuance, GIS, engineering capability, coordination of NFIP requirements with Ohio DNR
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Review improvement with City's Chief Building Official.
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2021
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Ordinance 21-28 October 11, 2021
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Yes; Hilliard is community with a max. 0.5' floodplain increase; NFIP standard is a max. 1.0' rise in floodplain elevation
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Special Flood Hazard Area permit, NFIP Technical Bulletin 10-01
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.17.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards

of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.17-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	81	-	125	-	268	-	118	-	80	-
Multi-Family	0	-	0	-	0	-	216	-	4	-
Other (commercial, mixed-use, etc.)	6	-	10	-	18	-	19	-	13	-
Total Permits Issued	87	-	135	-	286	-	353	-	97	-

Table 9.17-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Heritage Preserve Eagle Pointe (H.P. Apartments)	Residential	-	-	-	-
Tarlton Meadows AWS Davidson Road	Commercial	5	-	no	Data Center
Known or Anticipated Major Development in the Next Five (5) Years					
Carr Farms	Residential	-	-	-	-
Alton Place AWS Cosgray Road	Residential Commercial	5	-	No	Residential Under Construction Data Center under initial construction
Hill Farms	Residential	229	-	No	Under Construction

9.17.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Hilliard's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Hilliard has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.17-1. City of Hilliard Hazard Area Extent and Location Map - Flood

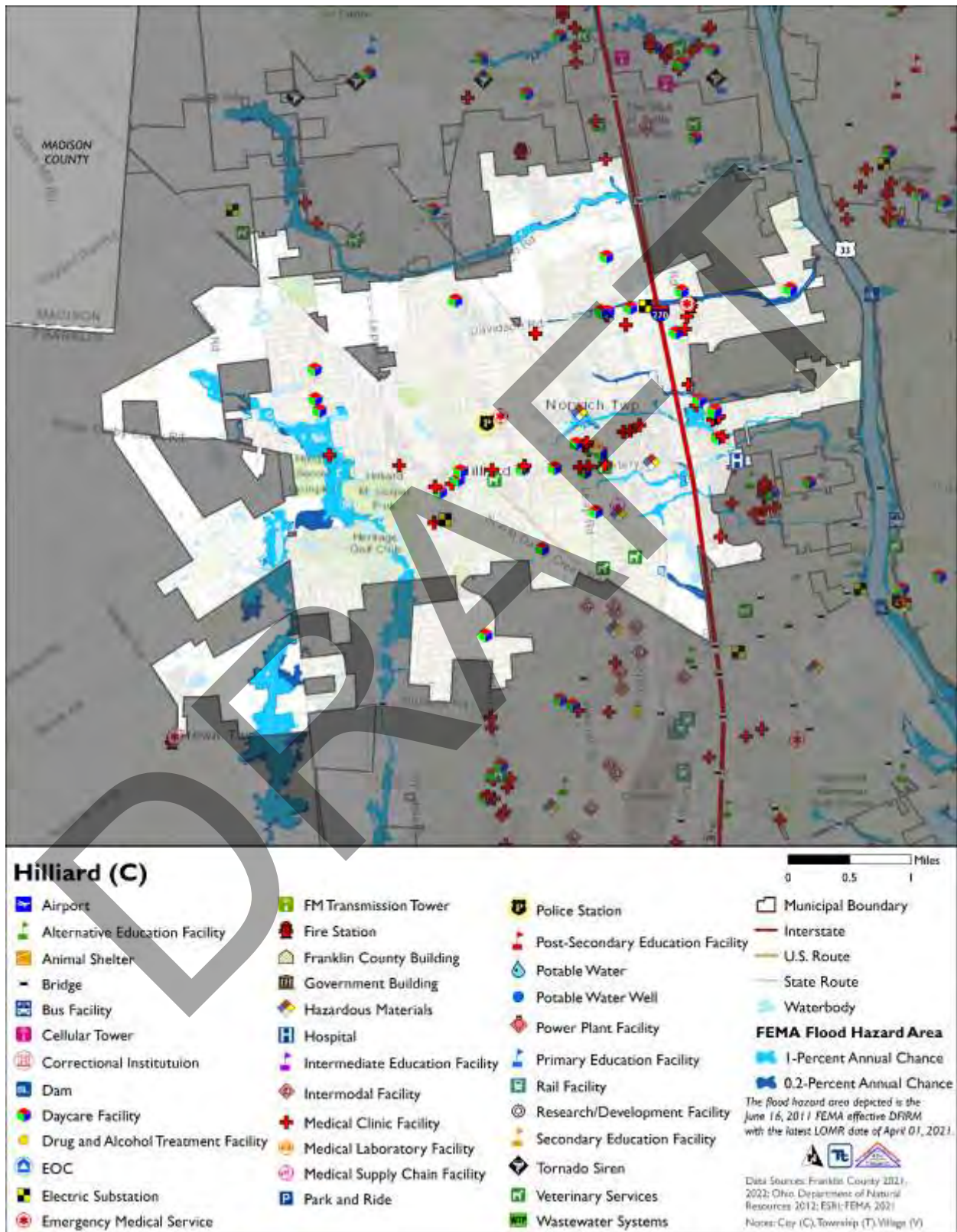


Figure 9.17-2. City of Hilliard Hazard Area Extent and Location Map – Inland Erosion

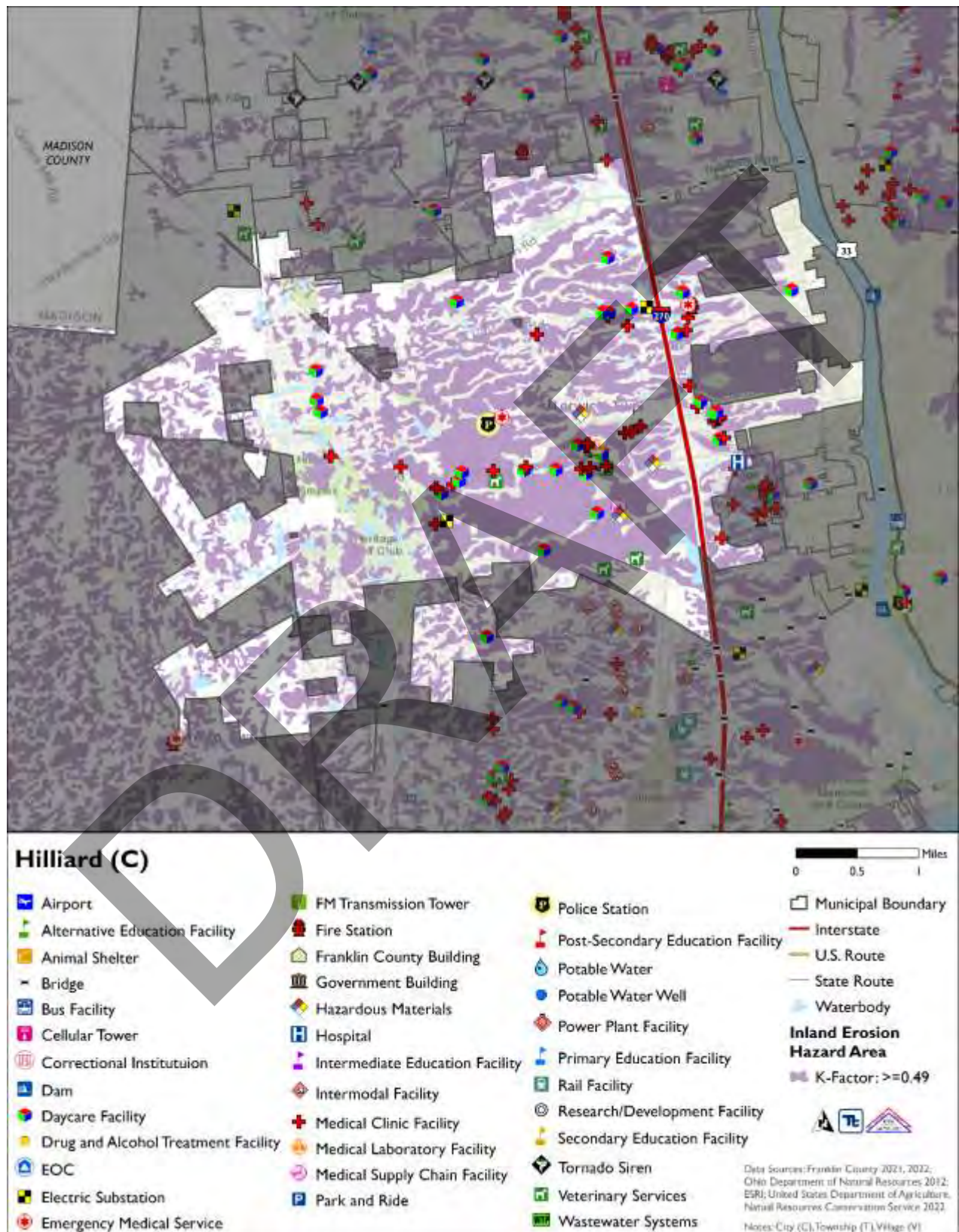
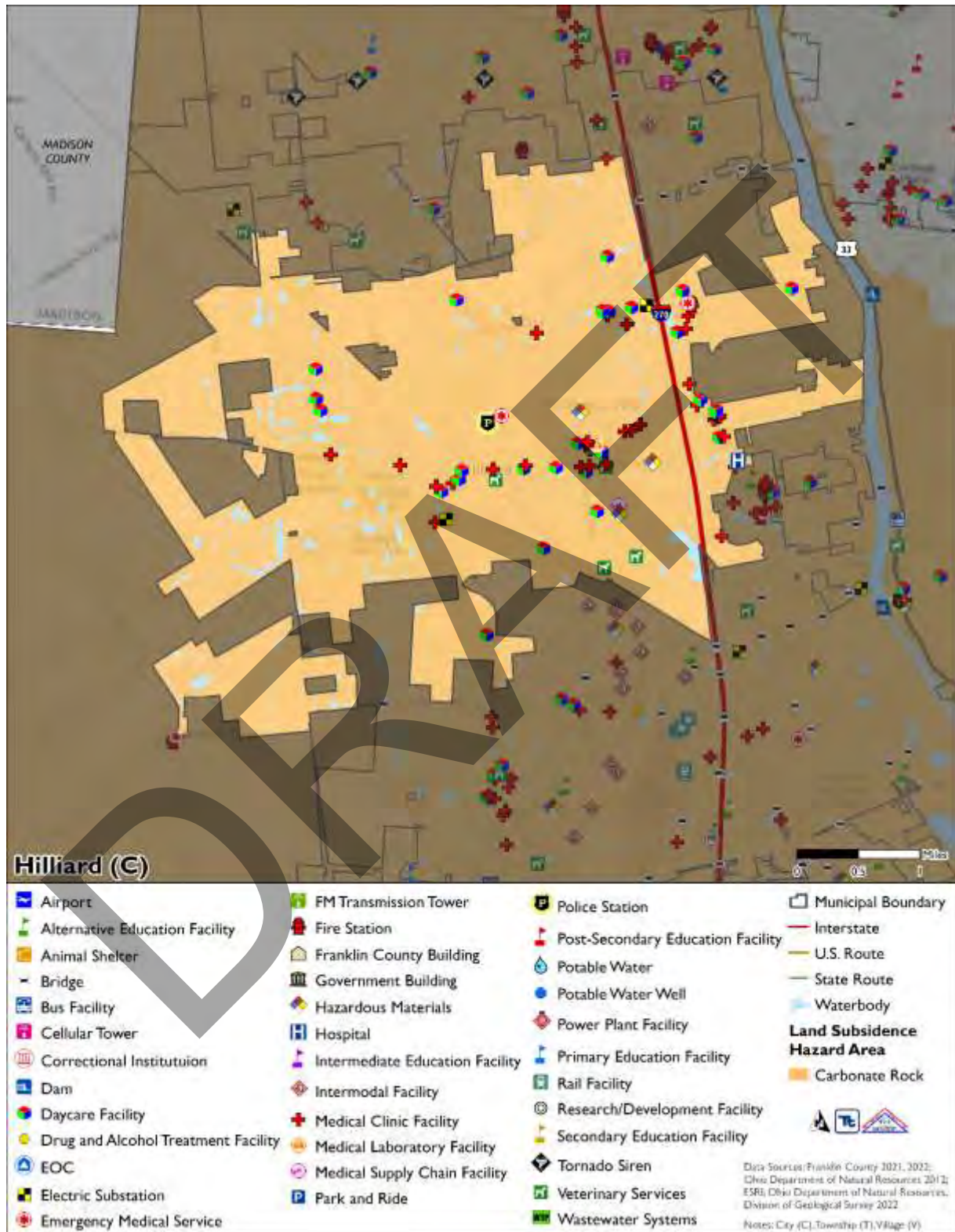


Figure 9.17-3. City of Hilliard Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Hilliard's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Hilliard experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.17-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Hilliard. The

City of Hilliard reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.17-14. Hazard Ranking Input

Hazard/Vulnerability	Ranking
Dam/Levee	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.17-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Hilliard

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	3	3
0.2-Percent Annual Chance Flood Event Hazard Area	5	5
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	64	50
Subsidence (Karst/Carbonate Rock) Hazard Area	101	73
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- Several areas of the City are prone to flooding from stormwater runoff.
- Many city facilities do not have back-up power to maintain critical facility services during a power outage.
- The City has limited staff and personnel resources (administrative and technical capabilities) available to contribute to hazard mitigation.

9.17.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.17-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities.	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR)	In Progress	Yes	Development in Big Darby Creek watershed implements practices to reduce volume of runoff. Recent Hilliard street and parking lot projects included pervious pavement to reduce volume of runoff.	-
Increase stormwater retention/detention features along waterways like, Holcomb Ditch, to reduce and/or slow the flow of stormwater.	Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR)	Ongoing	Yes	Stream bank erosion issues along ditches leading to Scioto River.	Hilliard, Franklin County

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Hilliard identified the following mitigation efforts completed since the last HMP:

- The Franklin County Engineers have implemented a new strategy to mitigate the effects of blowing snow in rural areas of the county. The corn stalk program will reimburse farmers for leaving cornstalks standing in county roadways being purposed as a natural fence. This mitigates and results in a reduction in blowing/drifting snow.
- Franklin County Climate Resilience Plan is being implemented soon with the help of Franklin County Public Health, AEP, MORPC, the Ohio state BYRD and Sustainable Columbus. The plan is purposed to mitigate and create action items for the effects of climate change that are projected to occur in Columbus. The plan looks at the Natural hazards within the Franklin County THIRA.

Since the adoption of the County's first HMP, the City of Hilliard has made significant mitigation progress in the following areas:

- Planning to ensure residents with functional needs are properly cared for in an emergency.
- Implementing projects to increase stormwater retention/detention features along waterways to reduce and/or slow the flow of stormwater.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Hilliard participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.17-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	X	-	X	-	-	X
Disease Outbreak	X	X	-	X	X	-	X	-	-	X
Drought	X	X	-	X	X	-	X	-	-	X
Earthquake	X	X	-	X	X	-	X	-	-	X
Extreme Temp	X	X	X	X	X	-	X	-	-	X
Flood	X	X	X	X	X	-	X	X	X	X
Geologic	X	X	X	X	X	-	X	-	-	X
Invasive Species	X	-	-	X	X	X	X	-	-	-
Severe Summer Weather	X	X	-	X	X	-	X	-	X	X
Severe Winter Weather	X	X	-	X	X	-	X	-	X	X

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Tornado	X	X	-	X	X	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.17-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

DRAFT

The table below summarizes the mitigation actions the City of Hilliard will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.17-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023 - Hilliard - 001	Reduce Stormwater Runoff	<p>Problem: Development in Big Darby Creek watershed implements practices to reduce volume of runoff. Recent Hilliard street and parking lot projects included pervious pavement to reduce volume of runoff.</p> <p>Solution: Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities.</p>	Flood	4	1 Year	City Planning/Zoning – City Engineer	BRIC, FMA, HMGP	Flooding will be significantly reduced.	> \$5,000	H	NSP	NR
2023 - Hilliard - 002	Stormwater Retention/Detention	<p>Problem: Stormwater runoff creates stream bank erosion issues along ditches leading to Scioto River.</p> <p>Solution: Increase stormwater retention/detention features along waterways like, Holcomb Ditch, to reduce and/or slow the flow of stormwater.</p>	Flood	4	1 Year	City Planning/Zoning – City Engineer	BRIC, FMA, HMGP	Flooding will be significantly reduced.	> \$5,000	H	NSP	NR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023 - Hilliard - 003	Purchase Generators for Public Buildings	Problem: Intense storms, temperature events and other natural hazards of concern lead to power and utility interruption within the City. Without backup power it makes it difficult for the City to be able to carry out continuity of operations with no power. Solution: Identify critical public building generator needs and seek funding to purchase.	Drought, Disease Outbreak, Earthquake Extreme Temp, Flood, Geologic, Severe Summer Weather Severe Winter Weather, Tornado	4	5 Years	City Administration – Critical City Facility Leadership	City Budget/HMGP	City facilities will be able to operate during power outages.	>\$25,000	H	SIP	ES
2023 - Hilliard - 004	Invasive Species Eradication Program	Problem: Invasive species are a problem in several areas, particularly those surrounding reservoirs. Solution: Start to control them by once-a-year spraying. To remove and/or chemically treat 5% of the invasive plant species each year.	Invasive Species	4	5 Years	City Planning/Zoning – City Engineer	BRIC, FMA, HMGP	The City's native species will become better protected.	\$2,000	H	NSP	PP, NR
2023 - Hilliard - 005	Continuity of Operations Plan	Problem: The City does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern Solution: The City will develop a Continuity of Operations Plan that will address the hazards of concern.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic,	5	1 Year	Township Administration	City Budget	The City will be better prepared to perform continuity of operations after a	Staff Time	High	LPR	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado					hazard event.				

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.17-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023 - Hilliard - 001	Reduce Stormwater Runoff	1	1	1	0	1	1	1	1	1	0	1	1	1	1	12	High
2023 - Hilliard - 002	Stormwater Retention/Detention	1	1	1	0	1	1	1	1	1	0	1	1	1	1	12	High
2023 - Hilliard - 003	Purchase Generators for Public Buildings	1	1	0	1	1	1	1	0	1	1	1	1	1	1	12	High
2023 - Hilliard - 004	Invasive Species Eradication Program	0	1	1	1	1	1	1	1	1	1	0	1	1	0	11	High
2023 - Hilliard - 005	Continuity of Operations Plan	1	1	1	1	1	1	1	0	1	1	1	1	1	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.18 TOWNSHIP OF JACKSON

This section presents the jurisdictional annex for the Township of Jackson that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Jackson participated in the planning process, an assessment of Jackson Township's risk and vulnerability, the different capabilities used in the Township of Jackson, and an action plan that will be implemented to achieve a more resilient community.

9.18.1 Hazard Mitigation Planning Team

The Township of Jackson identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Jackson Township departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.18-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Shane Farnsworth, Township and Zoning Administrator	Name/Title:	-
Address:	3756 Hoover Road, Grove City, Ohio 43123	Address:	-
Phone Number:	(614) 991-6881	Phone Number:	-
Email:	farnsworths@jacksontwp.org	Email:	-
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors			
Name/Title:	No additional contributors		
Method of Participation:			

9.18.2 Municipal Profile

The Township of Jackson is in south-central Franklin County and borders Hamilton Township, Pleasant Township, Prairie Township, and the County of Pickaway. Located 10 miles southwest of the City of Columbus, Jackson Township is known for its personal service to its community; the intimate knowledge of the community, its needs, and its people, allows for more attention to individual needs and a better understanding of local problems. Jackson Township has a total area of 35.7 square miles, 35.4 square miles of land and 0.3 square miles of water.

According to the U.S. Census, the 2020 population for Jackson Township was 46,340, a 14.11 percent increase from the 2010 Census. Data from the 2020 U.S. Census indicate that 7.1 percent of the population is 5 years of age or younger and 18.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.18.3 Jurisdictional Capability Assessment and Integration

The Township of Jackson performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Jackson Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Jackson and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.18-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Basic Building Code	State, County, Local	Zoning Department, Franklin County Planning Department
<i>How does this reduce risk?</i> Building Codes give specific regulations to ensure that buildings meet minimum health and safety standards. This code reduces casualties, costs, and damage by creating stronger buildings designed to withstand disasters.				
Zoning/Land Use Code	Yes	Chapters 103-109, 201-208, 301-307	Local	Zoning Department, Zoning Board
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building.				
Subdivision Ordinance	Yes	Chapter 101	Local	Zoning Board
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, and open space.				
Site Plan Ordinance	Yes	Chapter 103, 107, and 108	Local	Zoning Board
<i>How does this reduce risk?</i> The ordinance requires all desired changes to a property to be identified and displayed on the plan, drawn to scale. Accompanying this document, a description of the special conditions or circumstances giving rise to the changes must be described, as well as how the changes may impact the surrounding area.				
Stormwater Management Ordinance	Yes	Stormwater Pollution Prevention Plan (NPDES) Co-Permittee with Franklin County Engineer	Franklin County	Franklin County
<i>How does this reduce risk?</i> To help improve/ in-sure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	Yes	Jackson Township Comprehensive Plan, 2010	Local	Board of Trustees, Franklin County Economic Development and Planning
<i>How does this reduce risk?</i> The inclusion of growth management within the Comprehensive Plan ensures that growth is appropriate, well-timed, and beneficial to the well-being of the Township. It is noted that the primary goal of the Comprehensive Plan is to provide guidance in absorbing expected growth while protecting the natural and built environment, minimizing land use conflict, and protecting the area's natural beauty.				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007	County	Franklin County Planning Department
<i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Jackson Township Comprehensive Plan, June 2010	County	Zoning
<i>How does this reduce risk?</i> Provides a vision that achieves the goals of preparing for future growth, enhancing the quality of life for Jackson Township residents, and ensuring that the community is safe and well cared for. There are maps which depict the soil type and flood hazard areas. Also, there is a district for Agriculture Conservation and Stream Buffer. The plan discusses the hazards of development in the floodplain but does not note any ordinances or regulations discouraging it.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	Franklin County	Stormwater Executive Committee
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Stormwater Pollution Prevention Plan, 2011	Local	Service Department
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Jackson to oversee and track development.

Table 9.18-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	The Jackson Township Zoning Office collects Zoning Compliance applications and issues the appropriate certifications. The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits.
If you do not issue development permits, what is your process for tracking new development?	N/A	Coordinate with the Franklin County Building Department.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The Township of Jackson does not track permits; it coordinates with the Franklin County Building Department to maintain its list.
Do you have a buildable land inventory? • If yes, please describe	No	The Franklin County Building Department and/or the Franklin County Economic Development and Planning Department may have an inventory, but the Township of Jackson does not.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Jackson and their current responsibilities that contribute to hazard mitigation.

Table 9.18-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	Yes	The Township Zoning Commission consists of five regular members and can have up to two alternate members, a quorum of three members is required to convene a public meeting and rule on cases presented.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Service Department is the Township's Public Works Department. The Service Department maintains all Township streets and rights-of way, maintains parks, cemeteries, buildings, and fire stations, collects electronic waste year-round. Coordinates fall leaf pick-ups, removes snow and ice from Township roads, among other tasks.
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	The Jackson Township Fire Department provides fire suppression, emergency medical service, hazardous material decontamination, as well as multiple disciplines of technical rescue. The department also operates a full-time fire prevention bureau and public safety education program. Jackson Township maintains a fleet of five engines (one in reserve), one aerial ladder, seven medic units (three in reserve), two rescue boats, one hazardous material unit, and one command vehicle. The Jackson Township Fire Department operates four full-time stations with firefighters and EMTs on staff.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Participant in Alert Franklin County
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Service Department maintains all Township streets and rights-of way, maintains parks, cemeteries, buildings, and fire stations, collects electronic waste year-round. Coordinates fall leaf pick-ups, removes snow and ice from Township roads, among other tasks.
Mutual aid agreements	No	-
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Zoning Department and Zoning Board
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	Yes	Financial Officer
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to Jackson Township.

Table 9.18-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas, or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Jackson Township.

Table 9.18-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Yes, the Township Administrator.
Personnel skilled or trained in website development	Yes	Contracted
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	The Township will use its Facebook and Twitter pages to share information on impending severe weather and will share information from the County's Emergency Management social media accounts.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Participant in Alert Franklin County
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	The Township will utilize its social media accounts to inform residents how to protect themselves for an impending hazard. The Fire Department also has a public safety education program to discuss fire hazards.

Community Classifications

The table below summarizes classifications for community programs available to Jackson Township.

Table 9.18-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
---------	----------------------------	-----------------------------------	------------------------------------

Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.18-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.18.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Jackson Township.



Table 9.18-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Jackson (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Jackson Township.

Table 9.18-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	Do not know many.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No, the most recent map update in 2007 did not include new analysis of streams.
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure
What are the barriers to running an effective NFIP program in the community, if any?	None

NFIP Topic	Comments
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Floodplain management is administered by Franklin County EDP which also administers county zoning and subdivision regulations.

9.18.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

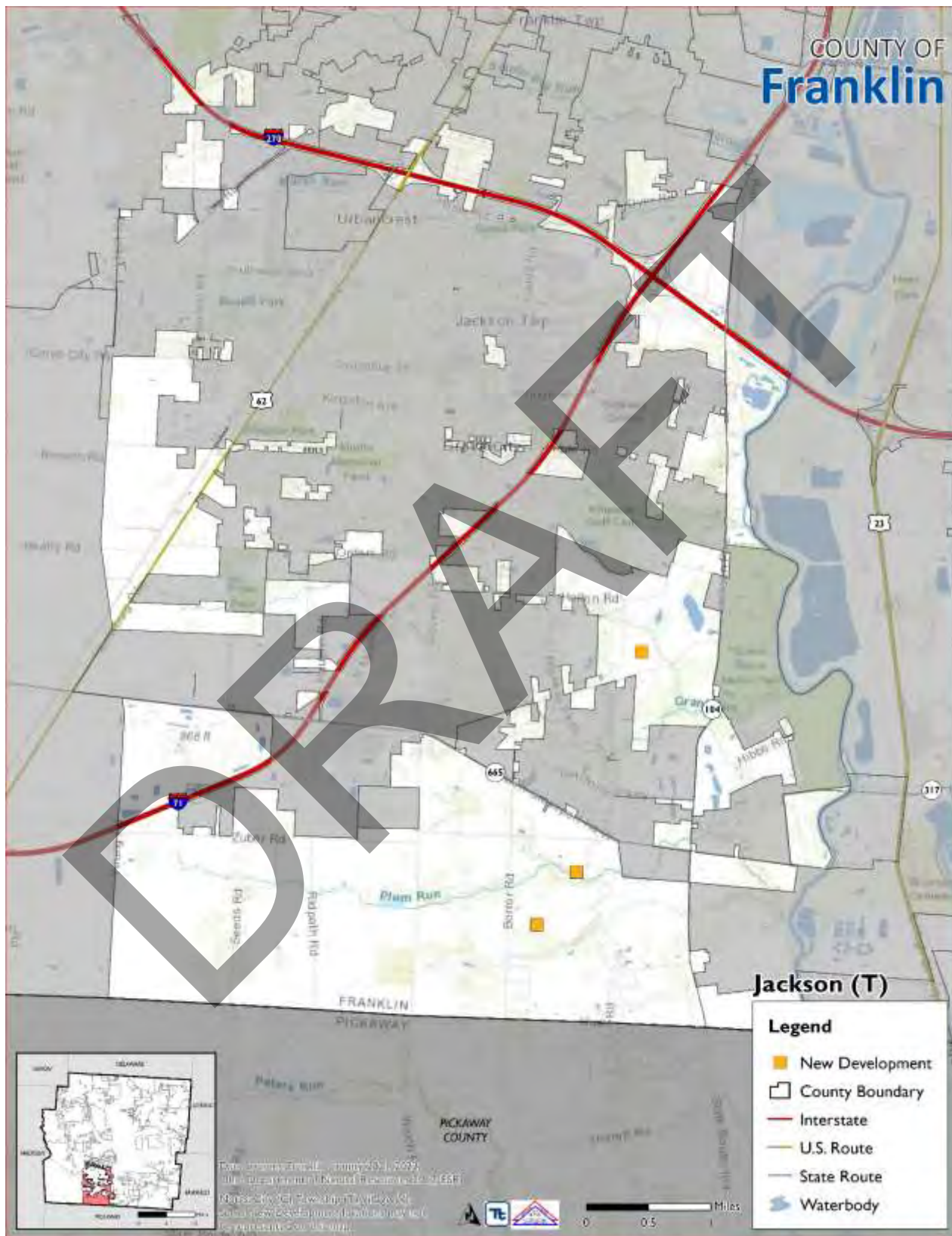
Table 9.18-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.18-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Figure 9.18-1. Jackson Township New Development



9.18.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Jackson Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Jackson has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.18-2. Jackson Township Hazard Area Extent and Location Map – Flood

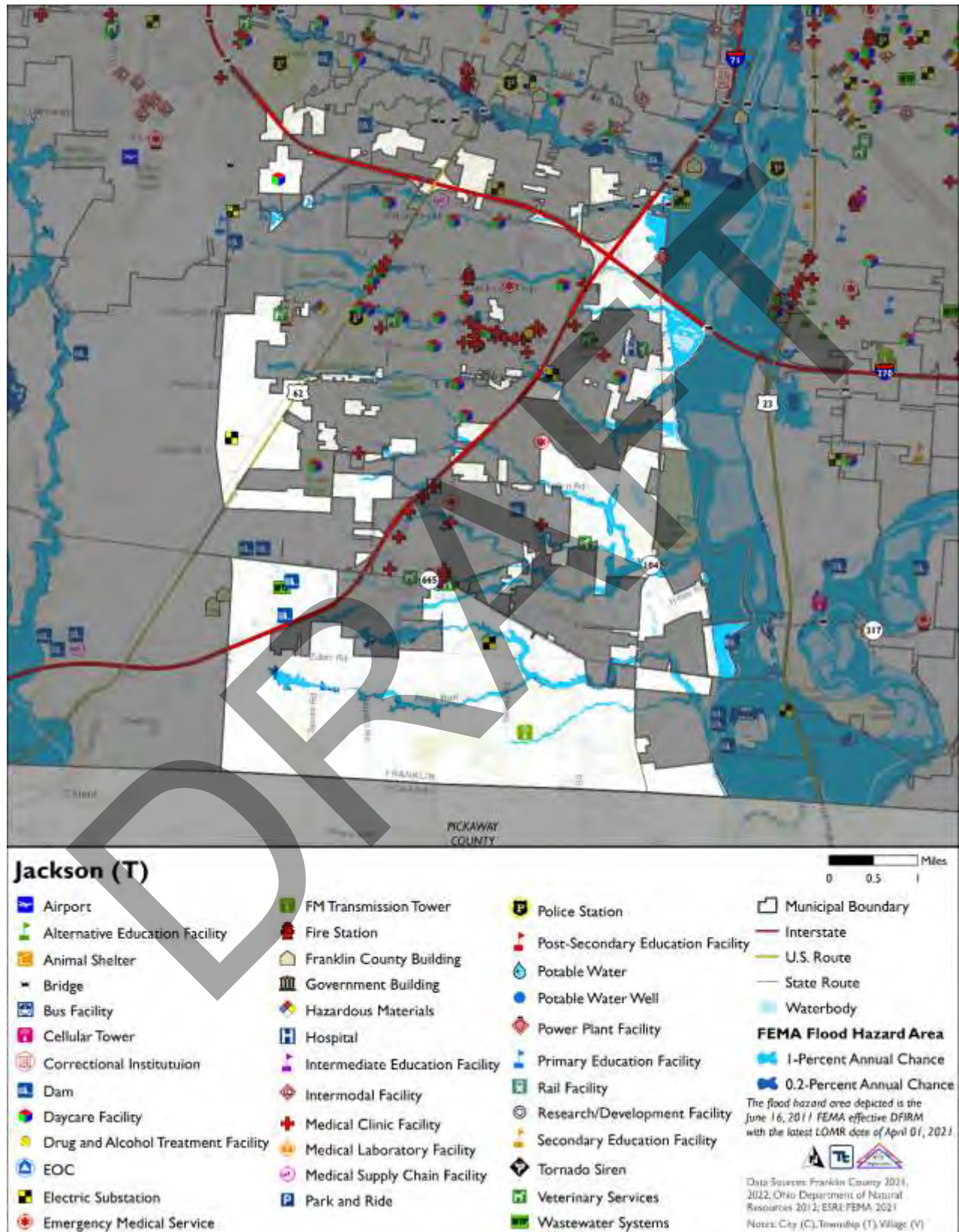


Figure 9.18-3. Jackson Township Hazard Area Extent and Location Map – Land Subsidence

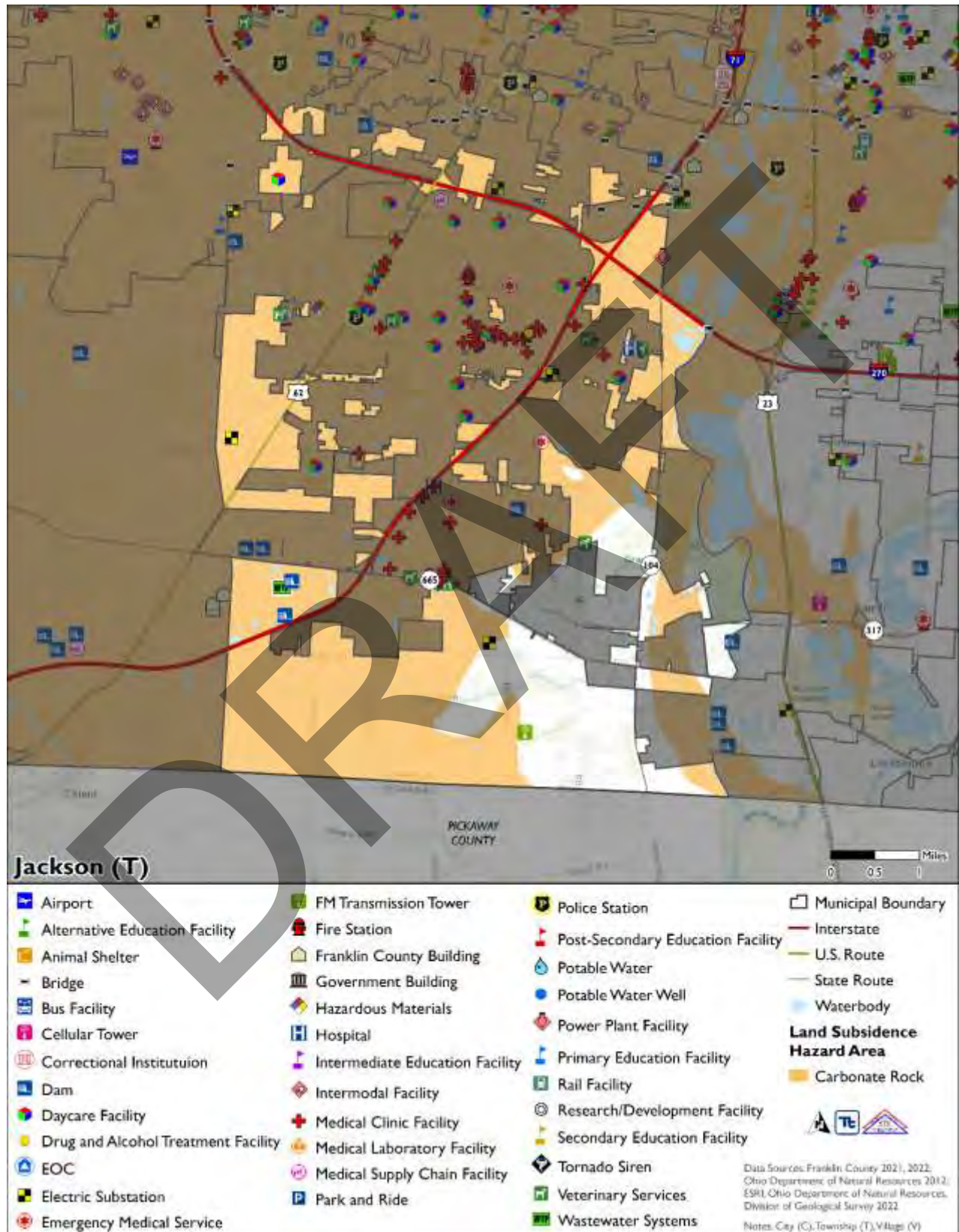
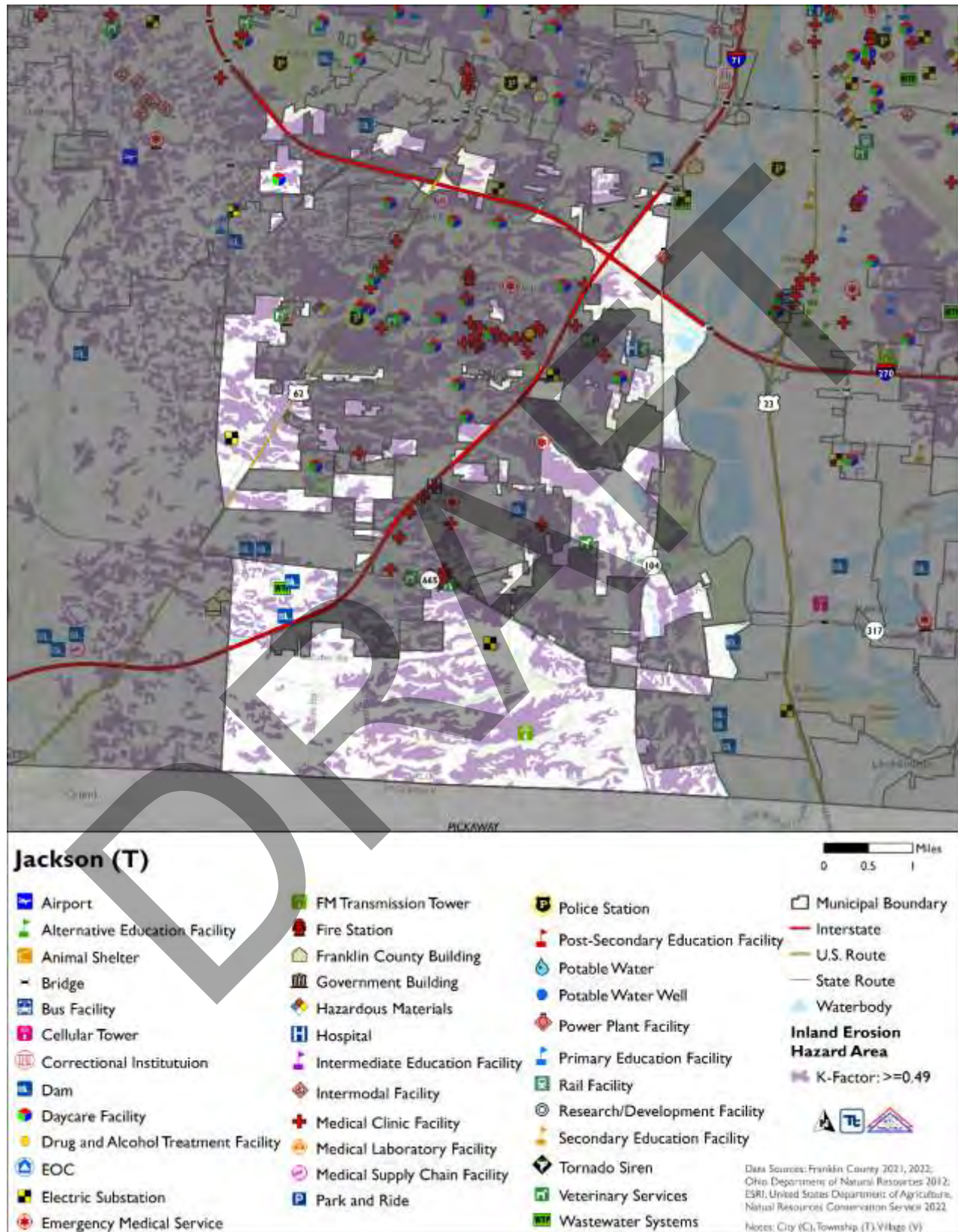


Figure 9.18-4. Jackson Township Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

Jackson Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Township of Jackson experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.18-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The Township did not experience any damages or losses from this event.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any damages or losses from this event.
March 2020-present	Covid-19 Pandemic, DR-4488	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Jackson. Jackson Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.18-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperatures	Medium
Flood	Medium
Geologic (Erosion)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.18-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Jackson Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	6	5
Subsidence (Karst/Carbonate Rock) Hazard Area	9	8
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	1	1

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Jackson Township identified the following vulnerabilities within its community:

- The Township has limited methods for public education of all hazard risks.
- The Township has not developed public outreach regarding all hazards and the Township's susceptibility to those hazards.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.18.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.18-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for public information including outreach projects and technical assistance to property owners. (10,000 / 1 year)	Township Trustee's Office	No Progress	Yes	Limited public outreach on all hazards and property owners are unsure how to apply for assistance.	Township Trustee's Office
Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (5,000 /ongoing)	Township Trustee's Office	No Progress	Yes	Limited public outreach on all hazards.	Township Trustee's Office

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Jackson identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Township of Jackson has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Township of Jackson participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.18-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	-	-	-	X	-	-	X	-	-	-
Disease Outbreak	-	-	-	X	-	-	X	-	-	-
Drought	-	-	-	X	-	-	X	-	-	-
Earthquake	-	-	-	X	-	-	X	-	-	-
Extreme Temperatures	-	-	-	X	-	-	X	-	-	-
Flood	-	-	-	X	-	-	X	-	-	-
Geologic (Erosion)	-	-	-	X	-	-	X	-	-	-
Invasive Species	-	-	-	X	-	-	X	-	-	-
Severe Summer Weather	-	-	-	X	-	-	X	-	-	-
Severe Winter Weather	-	-	-	X	-	-	X	-	-	-
Tornadoes	-	-	-	X	-	-	X	-	-	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.18-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Jackson Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.18-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Jackson-001	Property Owner Assistance	<p>Problem: The Township has limited methods for public education of all hazard risks.</p> <p>Solution: Seek funding for public information to conduct research projects and technical assistance to property owners.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	4, 5	2 years	Township Trustee's Office	BRIC, HMGP, Local Funds	Medium	Low	High	EAP	PI
2023-Jackson-002	All Hazards Public Outreach Campaign	<p>Problem: The Township has not developed public outreach regarding all hazards and the Township's susceptibility to those hazards.</p> <p>Solution: Work with Franklin County EM&HS to develop a public outreach campaign, which would include the use of social media, the Township website, and quick guides.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	4, 5	2 years	Township Trustee's Office, Franklin County EM&HS	BRIC, HMGP, Local Funds	High	Low	High	EAP	PI

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.18-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Jackson-001	Property Owner Assistance	0	1	1	1	1	1	1	0	0	1	1	1	1	0	10	High
2023- Jackson-002	All Hazards Public Outreach Campaign	1	1	1	1	1	1	1	0	0	0	1	1	1	0	10	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.19 JEFFERSON TOWNSHIP

This section presents the jurisdictional annex for Jefferson Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Jefferson Township participated in the planning process, an assessment of Jefferson Township's risk and vulnerability, the different capabilities used in Jefferson Township, and an action plan that will be implemented to achieve a more resilient community.

9.19.1 Hazard Mitigation Planning Team

Jefferson Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Jefferson Township departments, including Department of Public Safety, Zoning, and Service. The Township Administrator/Public Safety Director and the Assistant Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.19-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Dion Grener, Township Administrator and Public Safety Director	Name/Title:	Kelly Kiener, Assistant Township Administrator
Address:	6545 Havens Road Blacklick, Ohio 43004	Address:	6545 Havens Road Blacklick, Ohio 43004
Phone Number:	(614) 855-4260	Phone Number:	(614) 855-4260
Email:	dgrener@jeffersontownship.org	Email:	kkiener@jeffersontownship.org
NFIP Floodplain Administrator			
Name/Title:	Charles McCroskey, Zoning Administrator and Inspector		
Address:	6545 Havens Road, Blacklick, Ohio 43004		
Phone Number:	(614) 855-4265		
Email:	cmccroskey@jeffersontownship.org		
Additional Contributors:			
Name/Title:	Bradford Shull, Fire Chief		

Method of Participation:	Assisted in the completion of Worksheets A-E
Name/Title:	Joe Gerhart, Service Department Superintendent
Method of Participation:	Assisted in the completion of Worksheets A-E

9.19.2 Municipal Profile

Jefferson Township is near the northeast corner of Franklin County and borders the Licking County. Located 15 miles northwest of the City of Columbus, Jefferson Township is known for its rural character, quiet atmosphere, and abundance of open space. Jefferson Township has a total area of 15.3 square miles, 14.7 square miles of land and 0.2 square miles of water.

According to the U.S. Census, the 2020 population for Jefferson Township was 14,027, a 27.84 percent increase from the 2010 Census. Data from the 2020 U.S. Census indicate that 10.4 percent of the population is 5 years of age or younger and 17.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.19.3 Jurisdictional Capability Assessment and Integration

Jefferson Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Jefferson Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Jefferson Township and provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.19-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Basic Building Code	Local (commercial) Franklin County (residential)	Jefferson Township Zoning/Building & FC Development
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Jefferson Township Zoning Resolution	Jefferson Twp	Zoning/Building
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Zoning ordinance discourages development in floodways, wetlands and floodplains.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations	Franklin County	Matt Brown
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Stormwater Pollution Prevention Plan (NPDES) Co- Permittee with Franklin County Engineer	Franklin County	Franklin County
<i>How does this reduce risk?</i> To help improve/ in-sure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	Yes	Comprehensive Plan / Land Use Plan	Local	Economic Development and Planning
<i>How does this reduce risk?</i> Aim to keep density to 1 unit per gross acre.				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007	County	Franklin County Planning Department
<i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding.				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Jefferson Township Comprehensive Land Use Plan	Jefferson Township	Planning and Zoning Coordinator
<i>How does this reduce risk?</i> Provides a vision that achieves the goals of preparing for future growth while protecting the township's rural roots; enhancing the quality of life for Jefferson Township residents; and ensuring that the community is safe and well cared for. The plan also aims to mitigate congestion and to preserve the rural aesthetic of road corridors.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	County-Local Partnership	Franklin County / Jefferson Twp Service Department
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	Yes	COOP Plan	Local	All
<i>How does this reduce risk?</i> Primarily focused on alternate locations to operate from.				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Franklin County Risk Assessment	County	EMA
<i>How does this reduce risk?</i> Identifies risks associated with the hazards in the area and how to potentially mitigate those risks.				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of Jefferson Township to oversee and track development.

Table 9.19-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	For Zoning and commercial building
If you do not issue development permits, what is your process for tracking new development?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	Yes	Assessment of the capacity of land within the Township to accommodate forecasted housing and employment needs.
Describe the level of build-out in your jurisdiction.	N/A	The Township is primarily residential – mainly countryside residential compared to suburban. There are small areas of commercial properties, suburban offices, and community services. There are currently areas planned for new residential zoning. Portions of the Township are zoned industrial.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Jefferson Township and their current responsibilities that contribute to hazard mitigation.

Table 9.19-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Zoning Commission: authority to recommend approval with or without conditions, or denial of requests to rezone property or change the text of the zoning resolution
Zoning Board of Adjustment	Yes	Board of Zoning Appeals: authority to approve or deny requests for variances, conditional uses, and appeal
Planning Department	Yes	Zoning and Building Department, which includes planning functions
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	Parks Board: no current responsibilities related to hazard mitigation
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Service Department of 5 crew members, 1 foreman & Superintendent to maintain roads/ parks/ township buildings & grounds/ cemeteries/ & open spaces
Construction/Building/Code Enforcement Department	Yes	Zoning and Building Department (residential zoning, commercial zoning, and building); JTFD's Community Risk Reduction Bureau responsible for enforcement of fire code
Emergency Management/Public Safety Department	Yes	Jefferson Township Fire Department Note: Township Administrator dual role as Public Safety Director
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Participant in Alert Franklin County, although not used by the Township; outdoor warning signals managed by FCEMHS
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Service Department are partners with FCE & Franklin Soil & Water Conservation District to follow the (NPDES) National

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		Pollution Discharge Elimination System permit process in properly maintaining storm water drainage and run off. Response to service calls.
Mutual aid agreements	Yes	Fire Department specific
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning and Zoning Coordinator with education in City and Regional Planning
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	Township Administrator dual role as Public Safety Director
Grant writer(s)	Yes	Shared across all departments
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		
The Township of Jefferson's administrative and technical capabilities contribute to integration with the HMP and risk reduction through the review and issuance of permits and the maintenance of the Township. Together, the capabilities allow the Township to be prepared for the hazards which may impact its residents and visitors.		

Fiscal Capability

The table below summarizes financial resources available to Jefferson Township.

Table 9.19-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Jefferson Township.

Table 9.19-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	We have staff whose responsibilities include communications, but no dedicated position or department
Personnel skilled or trained in website development	Yes	We maintain website content internally
Hazard mitigation information available on your website	Yes	Link to Alert Franklin County (Everbridge)
Social media for hazard mitigation education and outreach	Yes	Facebook and Nextdoor used to communicate with residents
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Tornado sirens, Alert Franklin County (Everbridge, requires signup)
Natural disaster/safety programs in place for schools	No	Managed by school districts
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Social media, e-newsletter, emails for HOA points-of-contact, Everbridge

Community Classifications

The table below summarizes classifications for community programs available to Jefferson Township.

Table 9.19-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	Sept. 2018
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	Yes	NIMS certification	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.19-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.19.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Jefferson Township.

Table 9.19-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Jefferson (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Jefferson Township.

Table 9.19-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No

NFIP Topic	Comments
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Total cost of repairs is 50 percent or more of the structure's market value before the disaster occurred, regardless of the cause of damage.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	0 declarations.
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	Not aware of any
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Development
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program?	County is responsible
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	County is responsible
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	N/A
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	None
<ul style="list-style-type: none"> If so, state the violations. 	
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007
Does your floodplain management program meet or exceed minimum requirements?	N/A
<ul style="list-style-type: none"> If exceeds, in what ways? 	
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Not at Twp level

9.19.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

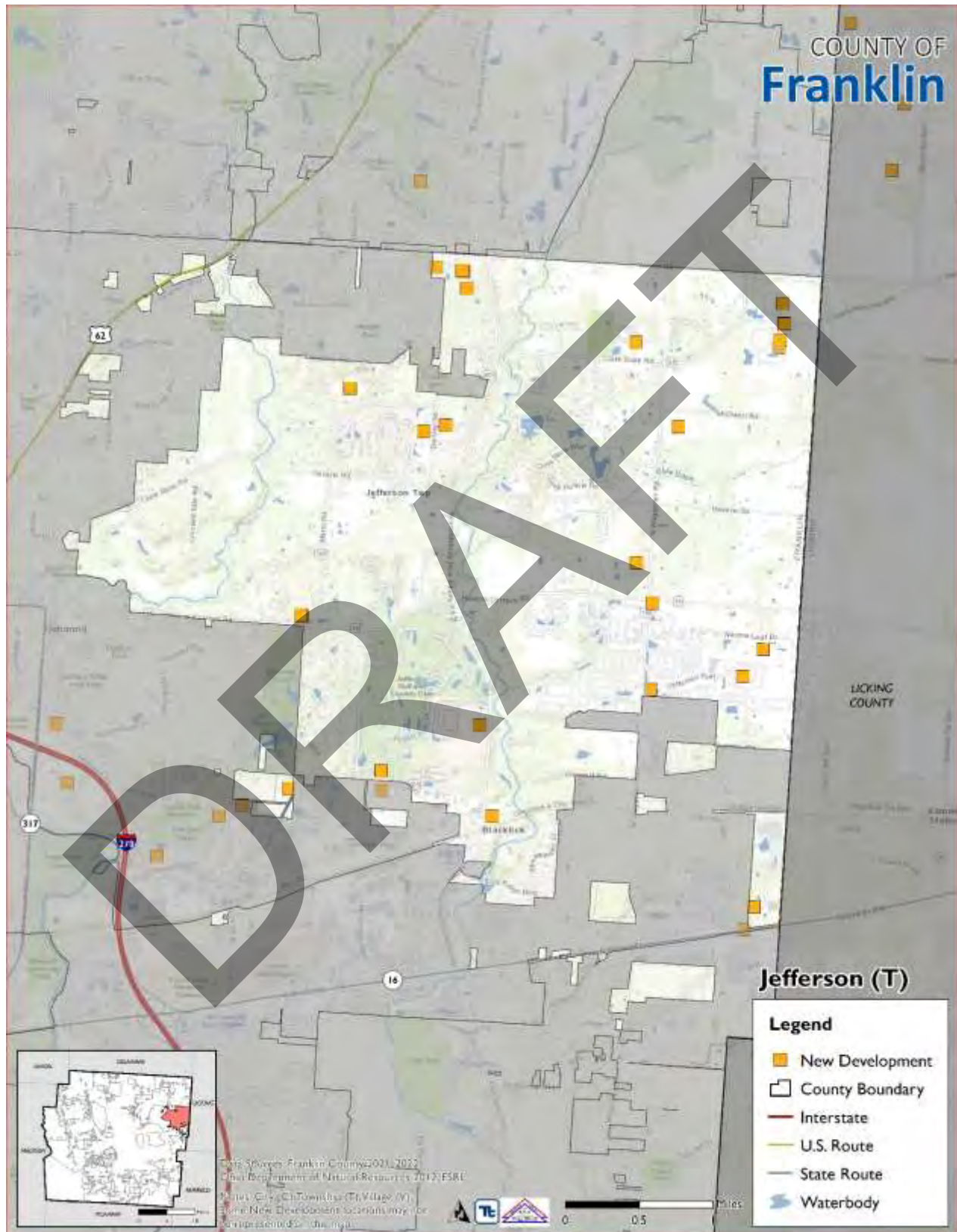
Table 9.19-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	131	-	153	-	200	-	215	-	126	-
Multi-Family	0	-	4 (108 units)	-	17 (416 Units)	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-
Total Permits Issued	131	-	157	-	217	-	215	-	126	-

Table 9.19-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Farms at Jefferson	Res	374	Clark State between Babbitt and Dixon	-	Single-Family – Construction ongoing
Killarney Woods	Res	200	Broad Street 171-000562	-	Multi-Family – Construction finished
Courtyards at Morse	Res	62	Morse Rd 170-000565	-	Single-Family – Construction ongoing
Gray's Point	Res	216	Rey-New Albany Rd 170-000737	-	Multi-Family – Construction finished
Briarfield	Res	40	Havens Corners Rd	-	Single-Family – Construction ongoing
Adam's Point	Res	108	941 Taylor Station Road 170-000814	-	Multi-Family- Construction finished
Paddock Reserve	Res	23	Waggoner Road	-	Single-Family – Construction finished
Morrison Farms East	Res	231	Havens Corners Rd	-	Single-Family – Construction ongoing
Parkwood	Res	76	Clark State Rd	-	Single-Family – Construction finished
Jefferson Run East	Res	165	Waggoner Rd	-	Single-Family – Construction finished
Weldon	Res	78	Rey-New Albany Rd	-	Single-Family – Construction finished
Woodland Creek	Res	29	Waggoner Rd	-	Single-Family – Construction finished
Known or Anticipated Major Development in the Next Five (5) Years					
Reserve at Jefferson	Res	38	Waggoner Rd 170-000491	-	Single-Family
Epcon South	Res	40	Rey-New Albany Rd 170-000497 170-000497	-	Single-Family
Towns at Morse	Res	62	Morse Road Rd 170-001483	-	Multi-Family
Farms at Taylor	Res	15	Taylor Road – 170-000214	-	Single-Family

Figure 9.19-1. Jefferson Township New Development



9.19.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Jefferson Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Jefferson Township has significant exposure. The maps also show the location of potential new development, where available. The facilities listed below were added after the analysis; therefore, the facilities were not included in the risk assessment.

- 6545 Havens Road, Blacklick, Ohio 43004 – Government Building
- 6545 Havens Road, Blacklick, Ohio 43004 – Cellular Tower
- 6620 Havens Corners Road, Blacklick, Ohio 43004 – Government Building
- 6620 Havens Corners Road, Blacklick, Ohio 43004 – Cellular Tower
- 6540 Havens Corners Road, Blacklick, Ohio 43004 – Primary Education Facility (elementary school)
- 1490 Climbing Fig Drive, Blacklick, Ohio 43004 – Primary Education Facility (elementary school)
- 7297 Blacklick Ridge Blvd, Blacklick, Ohio 43004 – Daycare Facility

Figure 9.19-2. Jefferson Township Hazard Area Extent and Location Map – Flood

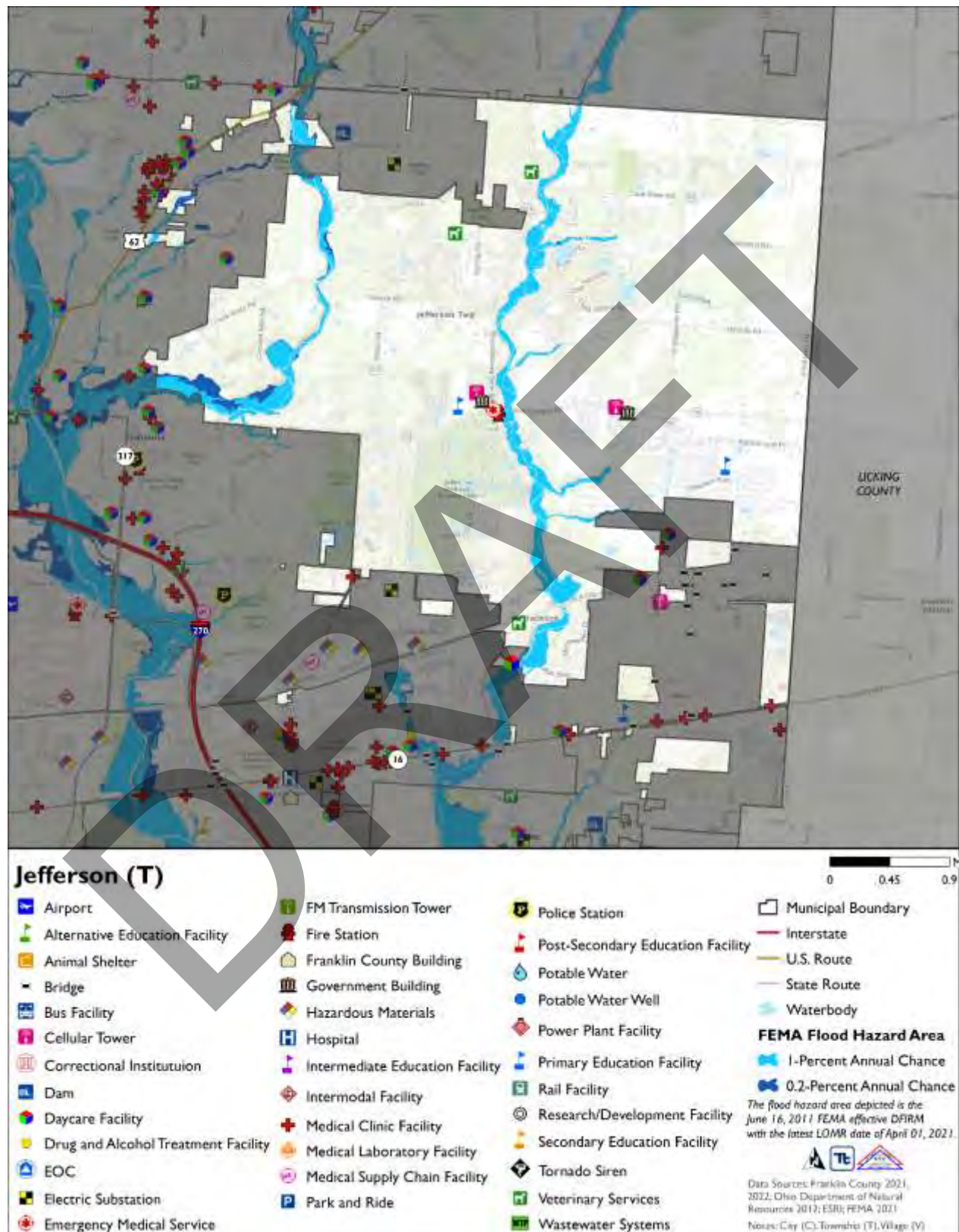


Figure 9.19-3. Jefferson Township Hazard Area Extent and Location Map – Land Subsidence

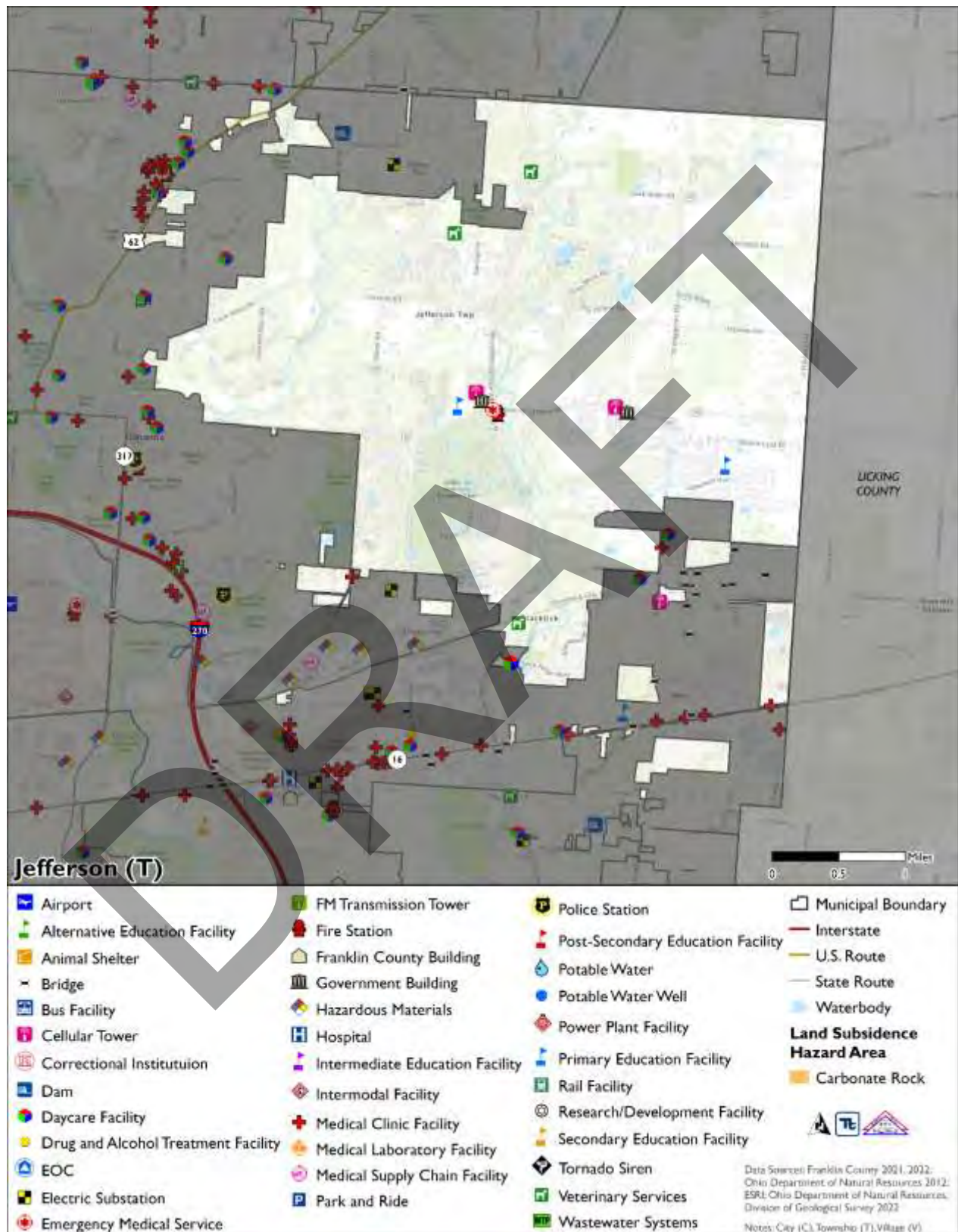


Figure 9.19-4. Jefferson Township Hazard Area Extent and Location Map – Inland Erosion

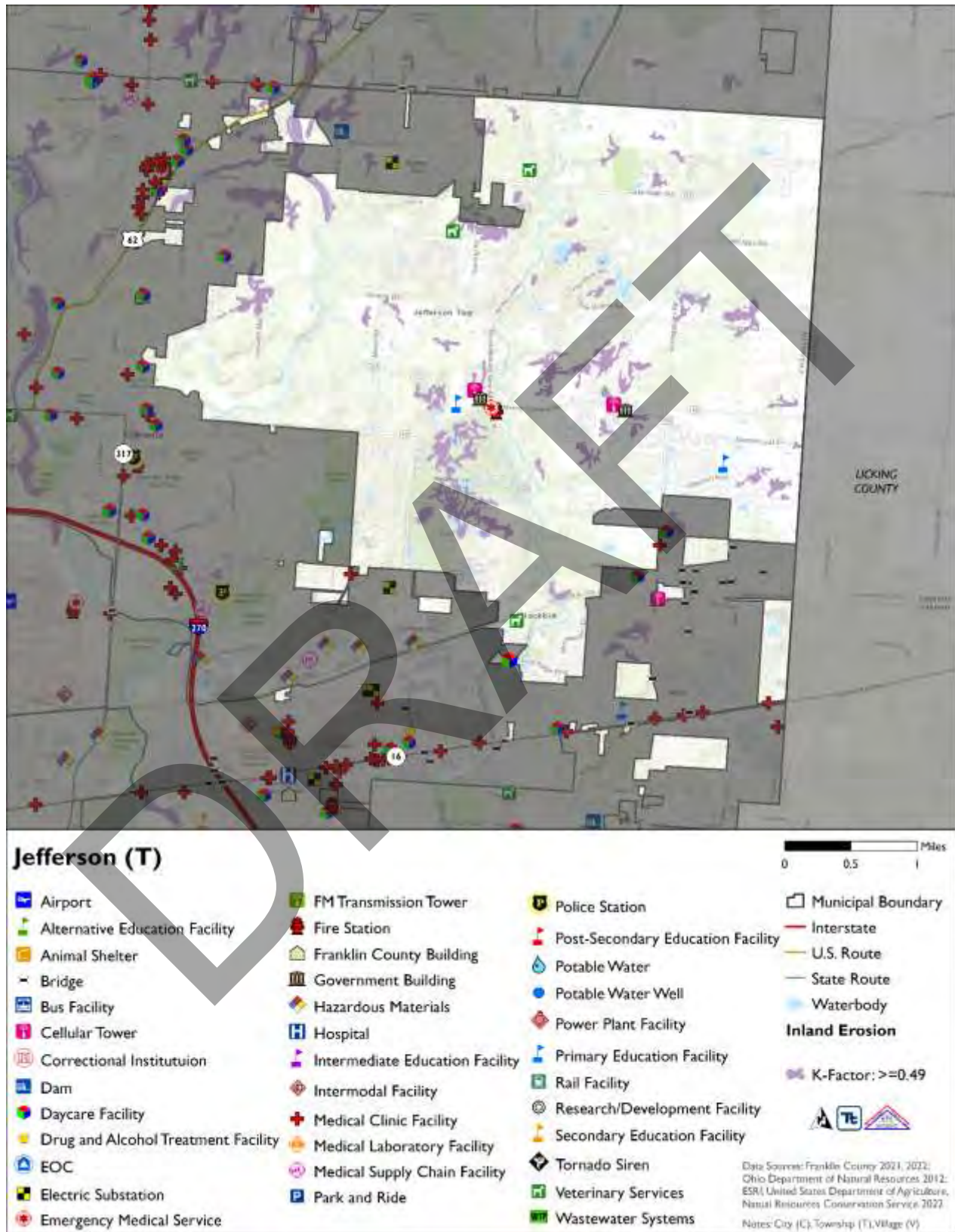
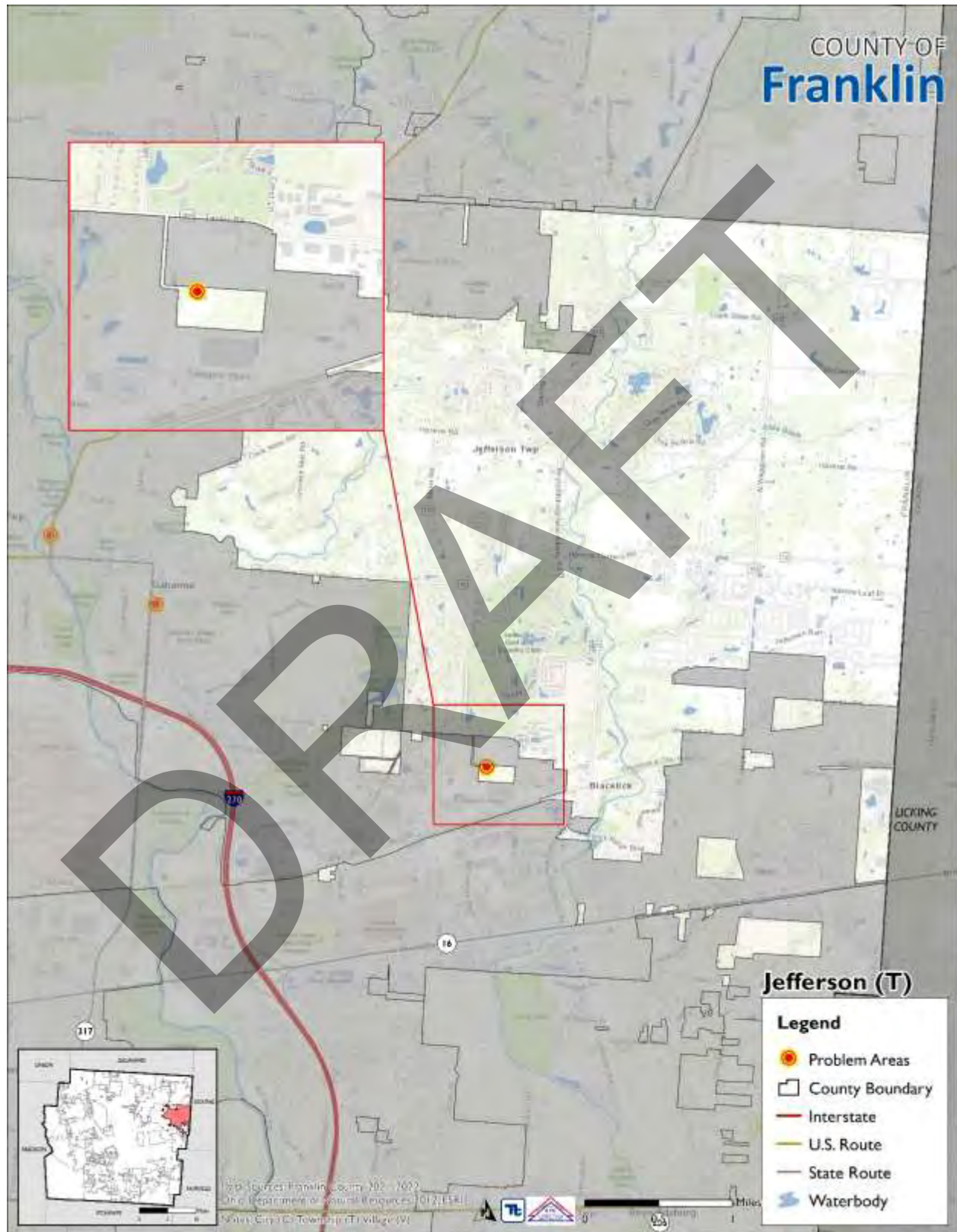


Figure 9.19-5. Jefferson Township Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Jefferson Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Jefferson Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.19-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	None incurred
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	None incurred
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	None incurred
March 2020-present	Covid-19 Pandemic, DR-4488	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	None incurred
March 20, 2020	Major Flooding	No	Showers and thunderstorms developed through the early morning hours as a low-pressure system moved through the Ohio Valley. Some of the storms produced locally heavy rainfall amounts of 2 to 3 inches. Several Township and County roads remained closed due to the earlier heavy rainfall.	Olde Quarry Park gravel parking lot and mulch trail was washed out. The gravel parking lot was re-graded, but the walking trail was not re-mulched.
August 11, 2021 – August 12, 2021	Major Flooding	No	Isolated thunderstorms developed along a slow-moving boundary in central Ohio. Township and County roads remained closed due to flooded roadways. Many roads which had never flooded in previous heavy rain events.	No losses to townships roads / or township owned properties

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4

(Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Jefferson Township. Jefferson Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Jefferson Township indicated that the hazard rankings were appropriate.

Table 9.19-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.19-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Jefferson Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1 Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- High winds, and its associated debris, have caused damages to above ground wires.
- Multiple stormwater drains are below capacity, causing flooding on the following roads: McOwen Road, Havens Road, Cob Tail Way, Dixon Road, Creek Hollow Road, and Jackson Hole Dr. at Poppy Hills Drive.
- The Township has limited methods for public education of hazard risks, including how to mitigate damages to property.
- Tornado sirens do not cover the entire Township, which directly impacts life safety.
- ALERT Franklin County does not always notify residents of hazards occurring in the jurisdiction.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.19.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.19-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If yes, please describe the original problem (i.e., hazard, location, historic losses)	If yes, identify the responsible department/person to implement the project.
Burying above-ground utility lines to mitigate wind/tree damage	AEP/Utilities	No Progress	Yes	Wind and tree damage from high winds and severe summer and winter weather to above ground wires.	Jefferson Township service dept with assistance from Franklin County Engineer's Office
Improve stormwater drainage system capacity at McOwen Road, Havens Road, Cob Tail Way, Dixon Road, Creek Hollow Road, Longstreth Park Place, Mann Road (Box Culvert)	Franklin County Engineer & Jefferson Township	Ongoing	Yes	NOTE: Longstreth Park Place, Mann Road complete Add intersection of Jackson Hole Dr. @ Poppy Hills Drive	Jefferson Township service dept with assistance from Franklin County Engineer's Office
Seek funding for public information including outreach projects and technical assistance to property owners. (10,000 / 1 year)	Township Trustee's Office	No Progress	Yes	Limited methods for public education of hazard risks.	Administration
Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (5,000 /ongoing)	Township Trustees Office	No Progress	Yes	Limited methods for public education of hazard risks.	Public Safety/Administration
Mitigate stream flooding in Fieldstone.	Franklin Soil and Water Conservation District	In Progress	No	-	-
Seek funding for the purchase of additional tornado sirens to increase coverage. (\$50,000.00)	Township Trustees Office	No Progress	Yes	Tornado sirens do not cover the entire Township. The Township would like to purchase additional sirens to provide coverage to the entire community.	Public Safety



Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If yes, please describe the original problem (i.e., hazard, location, historic losses)	If yes, identify the responsible department/person to implement the project.
Incorporating Code Red to provide all residents and businesses in the township with access to emergency notifications and severe weather alerts.	Township Trustees Office	No Progress	Yes	The Township utilizes ALERT Franklin, but not all residents may be signed up for the service. The Township would like expand this emergency notification program and not focus on Code Red.	Public Safety

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Jefferson Township identified the following mitigation efforts completed since the last HMP:

- The drainage system on Longstreth Park Place at Clark State Road was improved/upsized.
- A deteriorating box culvert was replaced on Mann Road between Havens Road and Havens Corners Road.
- A deteriorating metal culvert pipe was replaced with a large concrete pipe on Mann Road between Wynfield Drive and Clark State Road.
- A ditch petition was initiated by the Township for improvements to Cole Ditch.

Since the adoption of the County's first HMP, Jefferson Township has made significant mitigation progress in the following areas:

- Advancing flood mitigation measures through the replacement of culverts, upgrading drainage systems, and initiating petitions for ditch improvements.

Proposed Hazard Mitigation Initiatives for the HMP Update

Jefferson Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.19-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	-	-	X	-	-	X	-	-	X
Disease Outbreak	-	-	-	X	-	-	X	-	-	X
Drought	-	-	-	X	-	-	X	-	-	X
Earthquake	-	-	-	X	-	-	X	-	-	X
Extreme Temp	-	-	-	X	-	-	X	-	-	X
Flood	-	X	-	X	-	X	X	-	X	X
Geologic	-	-	-	X	-	-	X	-	-	X
Invasive Species	-	-	-	X	-	-	X	-	-	X
Severe Summer Weather	-	X	-	X	-	X	X	-	-	X
Severe Winter Weather	-	X	-	X	-	X	X	-	-	X
Tornado	-	X	-	X	-	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.19-17).

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Jefferson Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.19-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CFS Category
2023-Jefferson-001	Underground Powerlines	Problem: Wind and tree damage from high winds associated with tornadoes, severe summer weather, and severe winter weather to above ground wires. Solution: Bury above-ground utility lines to mitigate damages.	Severe Summer Weather, Severe Winter Weather, Tornadoes	4	5 years	American Electric Power, Jefferson Township, Franklin County Engineer's Office	BRIC	High	High	Medium	SIP	PP
2023-Jefferson-002	Increasing of Drainage Capacity- Cole Ditch	Problem: Cole Ditch is below capacity and causing flooding and erosion on the following roads: McOwen, Havens Road, Cob Tail Way, Dixon Road, and Creek Hollow Road as well as on private property Solution: Make improvements along Cole Ditch and place on the County's Drainage Maintenance Program	Flood	4	3 years	Franklin County Engineer's Office, Franklin County Commissioners, Jefferson Township	BRIC, HMGP, Local Funds Tax Assessment	High	High	High	SIP	PP, SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		via the Ditch Petition process.										
2023-Jefferson-003	Increasing of Drainage Capacity – Jefferson Meadows	Problem: Although stormwater drains are built the standard, the area of Poppy Hills Drive, Jackson Hole Drive, and Taylor Road floods during intense rain events. Solution: Collaborate with the Franklin County Engineer's Office to upsize drainage system/improve outlets.	Flood	4	3 years	Jefferson Township, Franklin County Engineer's Office	BRIC, HMGP, Local Funds Tax Assessment	High	High	High	SIP	PP, SP
2023-Jefferson-004	Property Owner Assistance	Problem: The Township has limited methods for public education of all hazard risks. Solution: Seek funding for public information to conduct research projects and technical assistance to property owners.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	4, 5	2 years	Jefferson Township, Administration	BRIC, HMGP, Local Funds	Medium	Low	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Jefferson-005	All Hazards Public Outreach Campaign	Problem: The Township has not developed public outreach regarding all hazards and the Township's susceptibility to those hazards. Solution: Work with Franklin County EM&HS to develop a public outreach campaign, which would include the use of social media, the Township website, and quick guides.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	4, 5	2 years	Jefferson Township Public Safety, Jefferson Township Administration, Franklin County EM&HS	BRIC, HMGP, Local Funds	High	Low	High	EAP	PI
2023-Jefferson-006	Tornado Siren Coverage	Problem: The tornado sirens do not cover the entire Township. Solution: Seek funding for the purchase of additional tornado sirens to increase coverage.	Tornado	4	4 years	Jefferson Township Public Safety	BRIC, HMGP	Medium	Medium	Medium	SIP	ES
2023-Jefferson-007	Alert Franklin County Campaign	Problem: Although there are notification methods in place, Township residents may not be informed of the Franklin County text alerts for hazards.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic,	4,5	2 years	Franklin County EM&HS, Jefferson Township Administration	HMGP, Local Funds	High	Low	High	EAP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: Along with Franklin County EM&HS, assist with the promotion of the text alert system so residents can stay informed and aware of any impending hazards.	Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes									

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.19-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Jefferson-001	Underground Powerlines	0	1	1	1	1	1	0	0	0	0	1	1	1	0	8	Medium
2023-Jefferson-002	Increasing of Drainage Capacity- Cole Ditch	0	1	1	1	1	1	1	1	0	0	0	1	1	0	9	High
2023-Jefferson-003	Increasing of Drainage Capacity – Jefferson Meadows	0	1	1	1	1	1	1	1	0	0	0	1	1	0	9	High
2023-Jefferson-004	Property Owner Assistance	0	1	1	1	1	1	1	0	0	1	1	1	1	0	10	High
2023-Jefferson-005	All Hazards Public Outreach Campaign	1	1	1	1	1	1	1	0	0	0	1	1	1	0	10	High
2023-Jefferson-006	Tornado Siren Coverage	1	0	1	1	1	1	0	0	0	1	0	1	1	0	8	Medium
2023-Jefferson-007	Alert Franklin County Campaign	1	0	1	1	1	1	1	0	0	1	1	1	1	0	10	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.20 VILLAGE OF LOCKBOURNE

This section presents the jurisdictional annex for the Village of Lockbourne that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Lockbourne participated in the planning process, an assessment of the Village of Lockbourne's risk and vulnerability, the different capabilities used in the Village of Lockbourne, and an action plan that will be implemented to achieve a more resilient community.

9.20.1 Hazard Mitigation Planning Team

the Village of Lockbourne identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many the Village of Lockbourne departments, including the Mayor's Office. The Deputy Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.20-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Christie Ward, Mayor	Name/Title:	Kendall Collins, Deputy Administrator
Address:	85 Commerce St., Lockbourne, OH 43137	Address:	85 Commerce St., Lockbourne, OH 43137
Phone Number:	(614) 491-3161	Phone Number:	(614) 491-3161
Email:	christie.ward@lockbourneohio.us	Email:	deputy.admin@lockbourneohio.us
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors:			
Name/Title:	Lindsey McKnight, Safety Committee Chair & Council Member		
Method of Participation:	Submitted problem and solutions online form; completed the hazard ranking worksheet		

9.20.2 Municipal Profile

the Village of Lockbourne is in south central Franklin County and borders Pickaway County. Located 10 miles south of the City of Columbus, the Village of Lockbourne is known for its rich history, including its involvement in the construction of the Ohio and Erie Canal line, which the Lockbourne Feeder Canal was a main channel (Village of Lockbourne n.d.). the Village of Lockbourne has a total area of 0.80 square miles, 0.75 square miles of land and 0.05 square miles of water.

According to the U.S. Census, the 2020 population for the Village of Lockbourne was 236, a 0.42 percent decrease from the 2010 Census population. Data from the 2020 U.S. Census indicate that 15.3 percent of the population is 5 years of age or younger and 11.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.20.3 Jurisdictional Capability Assessment and Integration

the Village of Lockbourne performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Lockbourne to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Lockbourne and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.20-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Basic Building Code	County	Franklin County Planning Department
<i>How does this reduce risk?</i> Building Codes give specific regulations to ensure that buildings meet minimum health and safety standards. This code reduces casualties, costs, and damage by creating stronger buildings designed to withstand disasters.				
Zoning/Land Use Code	Yes	Zoning Code adopted in 1994 Currently reviewing and updating	Local	Planning Commission
<i>How does this reduce risk?</i> Zoning establishes several applicable zone districts in the community. Residential, Commercial, Agricultural. Requirements for setbacks, parking, and other layout elements to ensure the safety of the residents. Zoning Code prevents mix of incompatible land use. Zoning Ordinance discourages development within the floodplain.				
Subdivision Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Stormwater Pollution Prevention Plan (NPDES)	Franklin County	Committee with Franklin County Engineer
<i>How does this reduce risk?</i> Helps reduce flooding and unclean water to enter into Big Walnut Creek.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007	County	Franklin County Planning Department
<i>How does this reduce risk?</i> Promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Stormwater Pollution Prevention Plan (NPDES) Co-Permittee with Franklin County Engineer	Franklin County	Franklin County	Stormwater Pollution Prevention Plan (NPDES) Co- Permittee with Franklin County Engineer
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other - Emergency Preparedness Plan <i>How does this reduce risk?</i> Our plan lists the steps that you take to make sure you are safe before, during and after an emergency or natural disaster.	Yes	Emergency Preparedness Plan, Unknown	Local	Safety Committee

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Lockbourne to oversee and track development.

Table 9.20-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Planning & Zoning Committee and Village Administrator
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Building permits are required through Franklin County Planning Department
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Lockbourne and their current responsibilities that contribute to hazard mitigation.

Table 9.20-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	Yes	Limited staff, all future and current planning
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Tornado siren, Alert Franklin County
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Tornado siren
Human Resources Manual	Yes	One Village Maintenance employee
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community? We are a small Village with limited resources and funding. We utilize the help of organizations like M.O.R.P.C and Franklin Soil and Water Conservation District to ensure the safety and mitigation of certain hazards.		

Fiscal Capability

The table below summarizes financial resources available to the Village of Lockbourne.

Table 9.20-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Lockbourne.

Table 9.20-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	We gained a large following of residents and community members alike via social media. When and if there is a disaster/hazard we can notify the community immediately.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	We have a tornado siren located in the Village.
Natural disaster/safety programs in place for schools	No	-

Outreach Resources	Available? (Yes/No)	Comment:
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	The Village Safety Committee has implemented an Emergency Preparedness Plan in which we are able to notify residents of potential hazards or emergency events.

Community Classifications

The table below summarizes classifications for community programs available to the Village of Lockbourne.

Table 9.20-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.20-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Moderate
Severe Winter Weather	Strong
Tornadoes	Moderate

9.20.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Lockbourne.

Table 9.20-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Lockbourne (V)	1	1	\$9,250.18	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Lockbourne.

Table 9.20-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	We have parkland in the flood zone. Currently you are not allowed to build in the flood zone. There is not a list of properties maintained.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	There is not a list maintained. 5 or less.
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also

NFIP Topic	Comments
	triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value). None
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	Zero properties
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Planning Department
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Yes, beneficial training would be considered.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	The Village sets regulations and policies dealing with the floodplain. At this time no residential development can occur in the floodplain area.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Planning and Zoning committee would review the plans and decide
What are the barriers to running an effective NFIP program in the community, if any?	Lack of staffing – residents
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Through Franklin County Planning Department
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	It meets the requirements
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Not currently
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Yes, the community is interested in joining the CRS program

9.20.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards

of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

The tables below summarize the number of building permits issued for new construction and recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.20-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.20-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Single Family House	Residential	1	104 Commerce Street	N/A	On-going
Single Family House	Residential	1	85 Landis Street	N/A	Built 2022
Single Family House	Residential	1	33 Williams Street	N/A	Built 2022
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Figure 9.20-1. the Village of Lockbourne New Development



9.20.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Lockbourne's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Lockbourne has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.20-2. the Village of Lockbourne Hazard Area Extent and Location Map - Flood

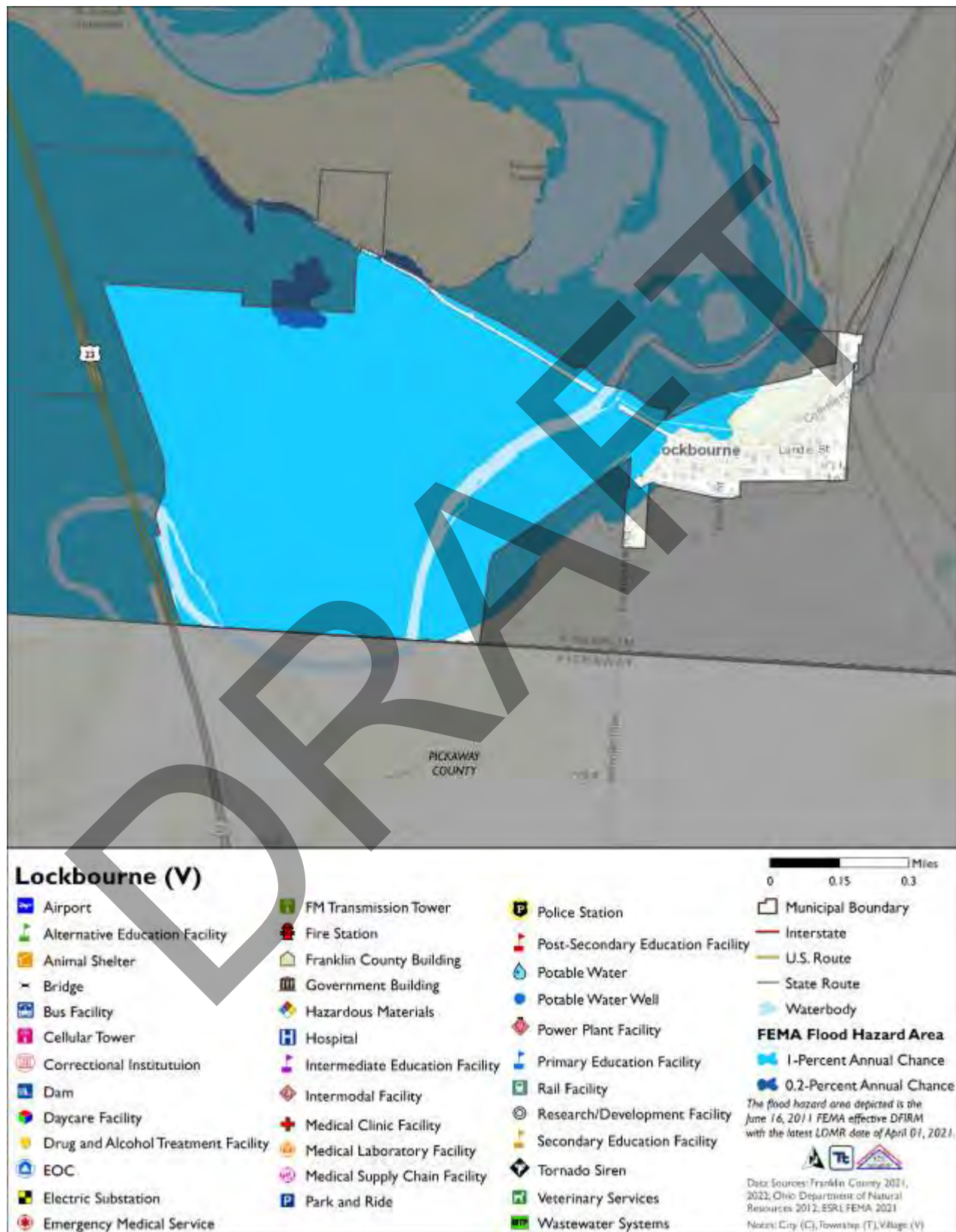


Figure 9.20-3. the Village of Lockbourne Hazard Area Extent and Location Map - Land Subsidence

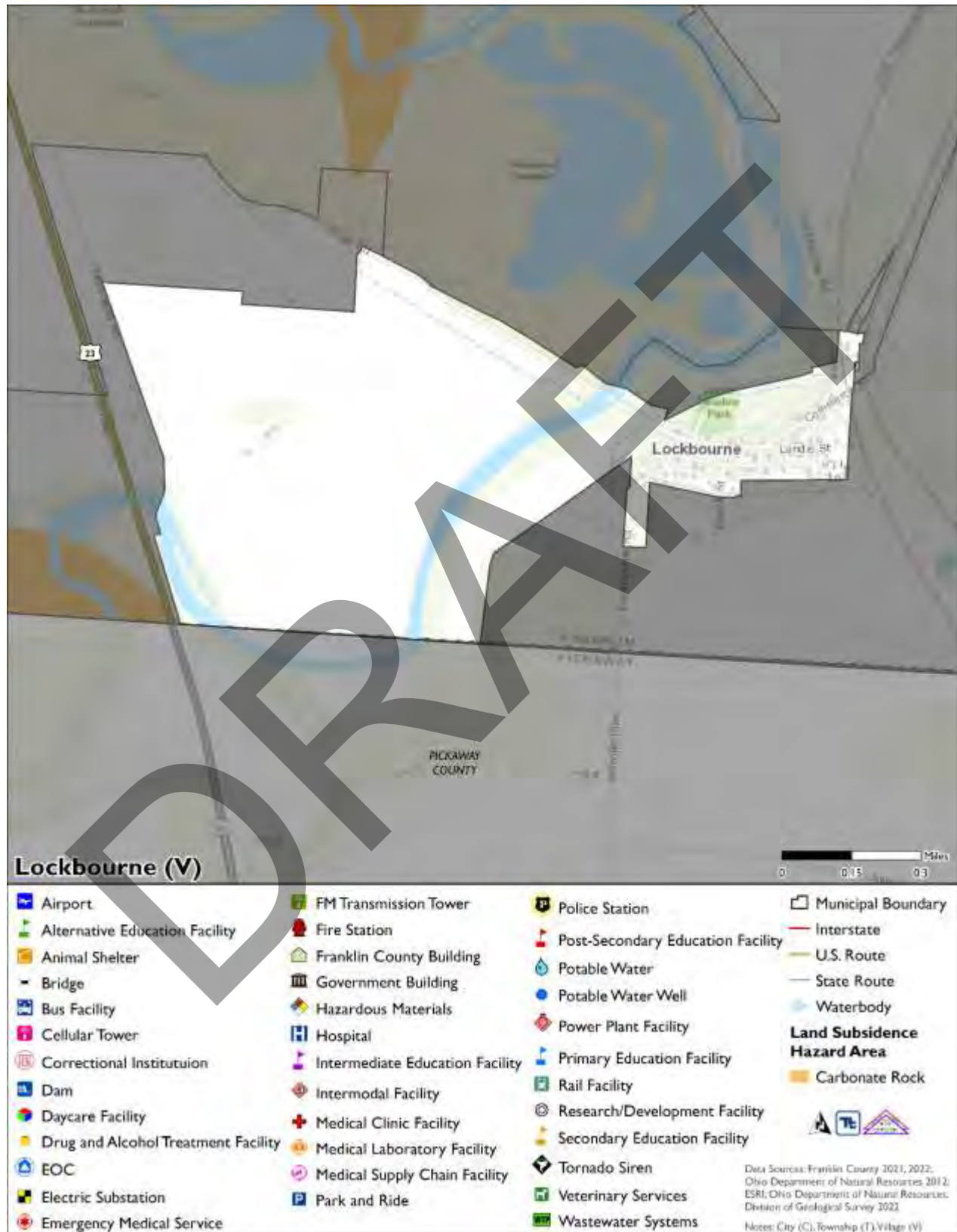
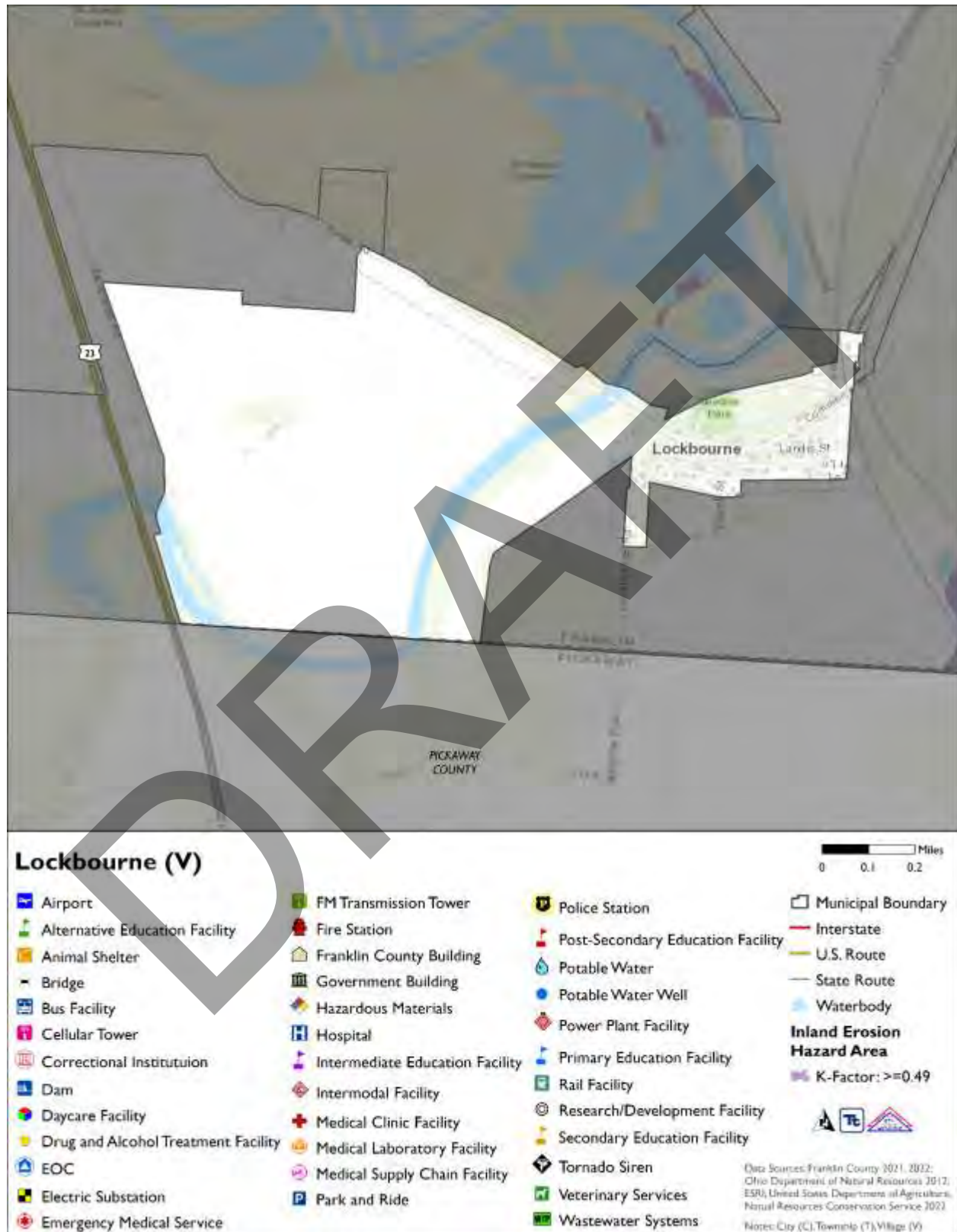


Figure 9.20-4. the Village of Lockbourne Hazard Area Extent and Location Map - Inland Erosion



[illegible]

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The Village of Lockbourne's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Lockbourne experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.20-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The Village did not experience any notable damages or losses.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Village did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Village did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic, DR-4488	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each

municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Lockbourne. the Village of Lockbourne reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Village of Lockbourne indicated the following:

- The Village agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.20-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperatures	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	Low
Severe Winter Weather	High
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.20-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Lockbourne

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	2	2
Delaware Dam Inundation (MH Breach) Hazard Area	1	1

Source: Franklin County; Hazus v5.

Identified Issues

In addition to the risk assessment, the Village of Lockbourne identified the following vulnerabilities within its community:

- Severe summer and winter weather frequently causes power outages in the Village, leaving the elderly and individuals with pre-existing conditions no place to go.
- The Emergency Shelter, located at the Village Hall, does not have an emergency generator to support its residents in the event of a power outage from hazards.

- Several houses surrounding Locke Meadow Park are impacted by flooding.
- Locke Meadow Park and Commerce Street, which is the entryway into the Park, have become eroded by flood waters.
- Spring Alley Ditch, located in Locke Meadow Park and goes along Commerce Street, suffers from pooling water following periods of rain, which promotes mosquito activity. The Spring Alley Ditch also contains invasive plant species, which negatively impact the environment of the Locke Meadow Park.
- Lock 30 at the Columbus Feeder Canal lock, a site on the National Registry of Historic Place, is eroding from flood waters. Stones within the Columbus Feeder Canal are also experiencing erosion issues due to flood waters. It should be noted that Locke Meadow Park encompasses the remnants of Lock 30 and the Big Walnut Creek guard lock, which prevent flood water from entering the main canal.

9.20.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.20-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If yes, please describe the original problem (i.e., hazard, location, historic losses)	If yes, identify the responsible department/person to implement the project.
Add Emergency System to Website	Village Administration and Mayor's Office	No Progress	Yes	Reduce local hazards, fire, train, flooding, shooting, etc.	Deputy Administrator
Send out emergency information through website opt-in alerts	Village Administration and Mayor's Office	No Progress	Yes	Need for centralized way to contact residents in the event of an emergency; partner with the County to promote ALERT Franklin	Deputy Administrator / Safety Committee
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2000 / 3 months)	Village Administration and Mayor's Office	No Progress	No	-	-
Purchase Tornado Sirens through Franklin County Emergency Management & Homeland Security. (40,000 / 4 months)	Village Administration and Mayor's Office	Complete	No	Completed	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Lockbourne identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Village of Lockbourne has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

the Village of Lockbourne participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.20-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	-	X	-	X	-	-	X	-	-	X
Disease Outbreak	-	X	-	X	-	-	X	-	-	X
Drought	-	X	-	X	-	-	X	-	-	X
Earthquake	-	X	-	X	-	-	X	-	-	X
Extreme Temperatures	-	X	-	X	-	-	X	-	-	X
Flood	X	X	X	X	X	X	X	X	X	X
Geologic	-	X	-	X	-	-	X	-	-	X
Invasive Species	-	X	-	X	X	-	X	-	-	
Severe Summer Weather	-	X	-	X	-	-	X	-	-	X
Severe Winter Weather	-	X	-	X	-	-	X	-	-	X
Tornadoes	-	X	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.20-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Lockbourne will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.20-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Lockbourne-01	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Village.</p> <p>Solution: Work with Franklin County EM&HS to provide residents of the Village of Lockbourne with the necessary information to protect themselves and understand the threats of all hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS, Lockbourne Deputy Administrator, Safety Committee	HMGP, Local Funding	High	Low	High	EAP	PI
2023-Lockbourne-02	Emergency Notification System*	<p>Problem: The Village does not have a centralized way to notify residents of potential hazards.</p> <p>Solution: Partner with Franklin County EM&HS, to promote the ALERT Franklin system so residents can stay</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood,	4, 5	2 years	Lockbourne Deputy Administrator, Safety Committee	HMGP, Local Funding	High	Low	Medium	EAP	PI, ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		informed and aware of any impending hazards.	Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes									
2023-Lockbourne-03	Critical Facility Back-Up Generator*	<p>Problem: The Village Hall, a critical facility, is the Village's emergency shelter location. The facility does not have back-up power.</p> <p>Solution: Install a back-up/emergency generator and transfer switch to the facility to maintain continuity of operations and provide a safe location for residents in the event of an emergency.</p>	Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes	6	5 years	the Village of Lockbourne Administration	BRIC, HMGP	High	Medium	High	SIP	ES
2023-Lockbourne-04	Increase NFIP Capabilities	<p>Problem: Repetitive loss residences and Critical Facilities are in the floodplain.</p> <p>Solution: Begin maintaining lists of properties damaged by flooding and of property owners who are interested in flood mitigation.</p>	Flood	1, 2	1 year	the Village of Lockbourne Administration, Franklin County Planning Department, Planning and Zoning Committee	HMGP, FMA, Local Funding	Medium	Low	Medium	LPR	PP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Lockbourne-05	FMA Program Consideration	<p>Problem: Several properties surrounding the Locke Meadow Park are impacted by flooding.</p> <p>Solution: Investigate feasibility of FMA Program to acquire or elevate affected properties.</p>	Flood	6	2 to 3 years	the Village of Lockbourne Administration, Franklin County Planning Department, Planning and Zoning Committee	FMA	High	High	High	SIP	PP
2023-Lockbourne-06	Spring Alley Ditch Project	<p>Problem: Spring Alley Ditch, located in Locke Meadow Park and goes along Commerce Street, suffers from pooling water following periods of rain, which promotes mosquito activity. The Spring Alley Ditch also contains invasive plant species, which negatively impact the environment of the Locke Meadow Park.</p> <p>Solution: Fill in Spring Alley Ditch and regrade to influence the flow of water and negate the adverse side effects of the ditch.</p>	Flood, Invasive Species	3, 6	3 to 4 years	Village Administrator, Franklin County Engineering	BRIC, HMGP, Local Funding	High	Medium	High	SIP	PR
2023-Lockbourne-07	Columbus Feeder Canal Preservation*	<p>Problem: Lock 30 at the Columbus Feeder Canal lock, a site on the National Registry of Historic Place, is eroding from flood waters. Stones within the Columbus Feeder Canal are also</p>	Flood	4, 6	4 to 5 years	Village Administrator, Franklin County Planning Department	Historic Preservation Fund, Ohio History Fund Grant	High	High	High	SIP	PP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		experiencing erosion issues due to flood waters. It should be noted that Locke Meadow Park encompasses the remnants of Lock 30 and the Big Walnut Creek guard lock, which prevent flood water from entering the main canal. Solution: Seek funding to restore the degraded portions of the Columbus Feeder Canal.										
2023-Lockbourne-08	Locke Meadow Park Flood Mitigation Measures*	Problem: Locke Meadow Park and Commerce Street, which is the entryway into the Park, have become eroded by flood waters. Solution: Investigate methods to mitigate flooding from Big Walnut Creek, which inundates Locke Meadow Park and Commerce Street. Such methods may include structural projects like floodwalls and retaining walls, or natural protections including corridor restoration, erosion control, and stream management.	Flood	3, 4, 6	2 to 3 years	Lockbourne Deputy Administrator, Safety Committee	BRIC, HMGP, Local Funding	Medium	Medium	High	SIP, NSP	SP, NR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

**Acronyms and Abbreviations:**

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.20-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Lockbourne-01	All-Hazards Education Campaign	1	0	1	1	1	1	1	0	0	1	1	1	0	0	9	High
2023-Lockbourne-02	Emergency Notification System	1	0	1	1	1	1	1	0	0	0	1	1	0	0	8	Medium
2023-Lockbourne-03	Critical Facility Back-Up Generator	1	1	1	1	1	1	0	0	0	0	1	1	1	0	9	High
2023-Lockbourne-04	Increase NFIP Capabilities	1	1	1	1	0	1	1	0	0	1	0	1	0	0	8	Medium
2023-Lockbourne-05	FMA Program Consideration	1	1	1	1	0	1	0	1	1	1	0	1	0	0	9	High
2023-Lockbourne-06	Spring Alley Ditch Project	0	1	1	1	1	1	1	1	0	0	1	1	1	0	10	High
2023-Lockbourne-07	Columbus Feeder Canal Preservation	1	1	1	1	1	0	0	1	1	0	0	1	1	0	9	High
2023-Lockbourne-08	Locke Meadow Park Flood Mitigation Measures	1	1	1	1	0	1	1	1	0	1	0	1	0	0	9	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.21 MADISON TOWNSHIP

This section presents the jurisdictional annex for Madison Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Madison Township participated in the planning process, an assessment of Madison Township's risk and vulnerability, the different capabilities used in Madison Township, and an action plan that will be implemented to achieve a more resilient community.

9.21.1 Hazard Mitigation Planning Team

Madison Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Madison Township departments. The Public Works Superintendent represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.21-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Susan Brobst, Township Administrator	Name/Title:	Dave Watkins, Public Works Superintendent
Address:	4575 Madison Lane Groveport, Ohio 43125	Address:	4585 Madison Lane Groveport, Ohio 43125
Phone Number:	(614) 836-5308	Phone Number:	(614) 836-4467
Email:	sbrobst@madisontownship.org	Email:	dwatkins@madisontownship.org
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors:			
Name/Title:	Stephen Moore, Groveport Building Official		
Method of Participation:	Submitted commercial construction building permits for Madison Township.		

9.21.2 Municipal Profile

Madison Township is in the southwest corner of Franklin County and borders Hamilton Township, Truro Township, and the Counties of Fairfield and Pickaway. Located 10 miles southeast of the City of Columbus, Madison Township was originally the largest township geographically in Franklin County. Its fertile soil and many waterways, along with four major creeks - Big Walnut, Blacklick, Alum, and Little Walnut, encouraged farming and other related agricultural enterprises. Today, Madison Township has a total area of 40.6 square miles, 39.9 square miles of land and 0.8 square miles of water.

According to the U.S. Census, the 2020 population for Madison Township was 25,896, a 10.15 percent increase from the 2010 Census population. Data from the 2020 U.S. Census indicate that 5.1 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.21.3 Jurisdictional Capability Assessment and Integration

Madison Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Madison Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Madison Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.21-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution – October 11, 2022	Franklin County	Zoning Officer
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Structures are not permitted to be built in the floodplain.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations – March 27, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Franklin County Stormwater Drainage Manual – March 13, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Franklin County's Flood Damage Reduction Regulation – September 19, 2007	Franklin County	Franklin County Floodplain Administrator
<i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding.				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Blacklick-Madison Area Plan – November 08, 2011	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides a vision that achieves the goals of preparing for future growth while protecting the desires of the community; enhancing the quality of life for Madison Township residents; and ensuring that the community is safe and well cared for. Plan does discuss a desire to mitigate congestion, preserve green space and agricultural areas.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	Franklin County	Stormwater Executive Committee
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> Identifies risks associated with the hazards in the area and how to potentially mitigate those risks.	Yes	Franklin County Risk Assessment	County	Franklin County EMA
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of Madison Township to oversee and track development.

Table 9.21-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Residential permits for Madison Township are issued by the Franklin County Building Department; commercial permits are issued by the City of Groveport, City of Canal Winchester, and City of Columbus.
If you do not issue development permits, what is your process for tracking new development?	N/A	There is no process. The Township relies on City of Groveport, City of Canal Winchester, City of Columbus, and the County to track new development.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	The building permit application asks for floodplain information so it can be applied to building code requirements if needed. Franklin County Development issues floodplain permits in Madison Township. The permits issued by Franklin County are sent to various departments for review, depending on the nature of the work. If any issues arise, it is noted and discussed.
Do you have a buildable land inventory? • If yes, please describe	No	The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage.
Describe the level of build-out in your jurisdiction.	N/A	The Township is primarily residential with parks and open space mixed in the residential areas; much of the residential area to the central-south of the Township is farmland preservation. Office and Commercial use properties are toward the central-north portion of the Township; some areas are mixed with residential areas. The Industrial use locations are primarily in the western portion of the Township, but a small area is located in the central-north just outside of the residential use area.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Madison Township and their current responsibilities that contribute to hazard mitigation.

Table 9.21-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	Madison Township relies on the Franklin County Planning Commission. The Planning Commission consists of the three Franklin County Commissioners and eight members appointed by the Board of County Commissioners. Three of the eight members are appointed from individuals nominated by the city of Columbus, another three members are appointed from individuals residing in unincorporated Franklin County recommended by townships of the county and the final two members are appointed at the discretion of the Board of County Commissioners with one member residing in unincorporated Franklin County and one member residing in a municipal corporation of the county. The specific powers and duties of the Planning Commission are identified in Section 713.23 of the Ohio Revised Code. The Planning Commission is responsible for reviewing major subdivision

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		and rezoning requests, and for completing Comprehensive Plans for townships in Franklin County.
Zoning Board of Adjustment	No	Madison Township relies on the Franklin County Board of Zoning Appeals. The Board of Zoning Appeals consists of five members appointed by the Franklin County Board of County Commissioners. Members must reside in the unincorporated area of one of the ten townships with County Zoning. It is a quasi-judicial board that acts on administrative appeals, conditional uses, and variances. It is their duty to maintain the intent and spirit of the zoning district in conformity with the Zoning Resolution. The BZA is responsible for hearing and deciding on three types of applications related to the administration of the Franklin County Zoning Resolution. These include administrative appeals, conditional uses, and variances.
Planning Department	No	Madison Township relies on the Franklin County Planning and Zoning Department. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County. The Economic Development and Planning Department administers county zoning for ten of the seventeen townships in Franklin County: Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon and Truro Townships.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	Madison Township relies on the Franklin County Community Development section of the Economic Development & Planning Department. This section is responsible for providing funding and technical assistance to support community development activities and initiatives in Franklin County outside the auspices of the City of Columbus. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County.
Public Works/Highway Department	Yes	Madison Township has 40.132 miles of roadway that is maintained by five public works department employees. A wide variety of duties are required to keep the roadways safe, including snow and ice removal, roadside ditch mowing, sign and road maintenance, tree and brush trimming, maintaining equipment, and consulting with residents on various issues.
Construction/Building/Code Enforcement Department	No	The Franklin County Building Department is the Building Department for Madison Township. The Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits.
Emergency Management/Public Safety Department	No	The Township of Madison has a Police Department and Fire Department, but not a joint Public Safety Department. Franklin County has an Emergency Management and Homeland Security Department that covers the entire County.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Tornado sirens, Alert Franklin County (Everbridge, requires signup)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The staff at the Public Works Department have duties which include tree and brush trimming and storm sewer repair and cleaning.

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Mutual aid agreements	Yes	Local agreements with surrounding towns for snow removal.
Human Resources Manual	No	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	Franklin County Planning Commission
Engineers or professionals trained in building or infrastructure construction practices	No	Franklin County Building Department
Planners or engineers with an understanding of natural hazards	No	Franklin County Economic Development & Planning Department
Staff with expertise or training in benefit/cost analysis	Yes	The Finance Department in Madison Township
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	No appointed official, but the Police and Fire Departments would be the responders.
Grant writer(s)	No	County assist the Township with grants.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		
The Township of Madison is reliant on Franklin County for assistance with many of the administrative/technical capabilities. However, this partnership creates a greater understanding of the risks in the community at the County level so various funding opportunities and projects are able to be implemented.		

Fiscal Capability

The table below summarizes financial resources available to Madison Township.

Table 9.21-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Madison Township.

Table 9.21-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	The position used to be filled but is now empty.
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	The Township and its Police Department both have Facebook pages. The pages can be used for hazard mitigation education and outreach.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Tornado sirens, Alert Franklin County (Everbridge, requires signup)
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Social Media (Facebook)

Community Classifications

The table below summarizes classifications for community programs available to Madison Township.

Table 9.21-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Commercial – 3 Residential – 3	May 26, 2020 2018
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.

- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.21-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.21.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Madison Township.

Table 9.21-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Madison (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Madison Township.

Table 9.21-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	Do not know many.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No, the most recent map update in 2007 did not include new analysis of streams.
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Floodplain management is administered by Franklin County EDP which also administers county zoning and subdivision regulations.

9.21.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.21-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	1	Yes	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	2	-	1	-	0	-	1	Yes	1	No
Total Permits Issued	3	1	1	-	0	0	1	Yes	1	No

Table 9.21-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
There has been no major development or infrastructure from 2018 to present.					
Known or Anticipated Major Development in the Next Five (5) Years					
There are no known or anticipated major development and infrastructure in the next five (5) years.					



9.21.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Madison Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Madison Township has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.21-2. Madison Township Hazard Area Extent and Location Map - Flood

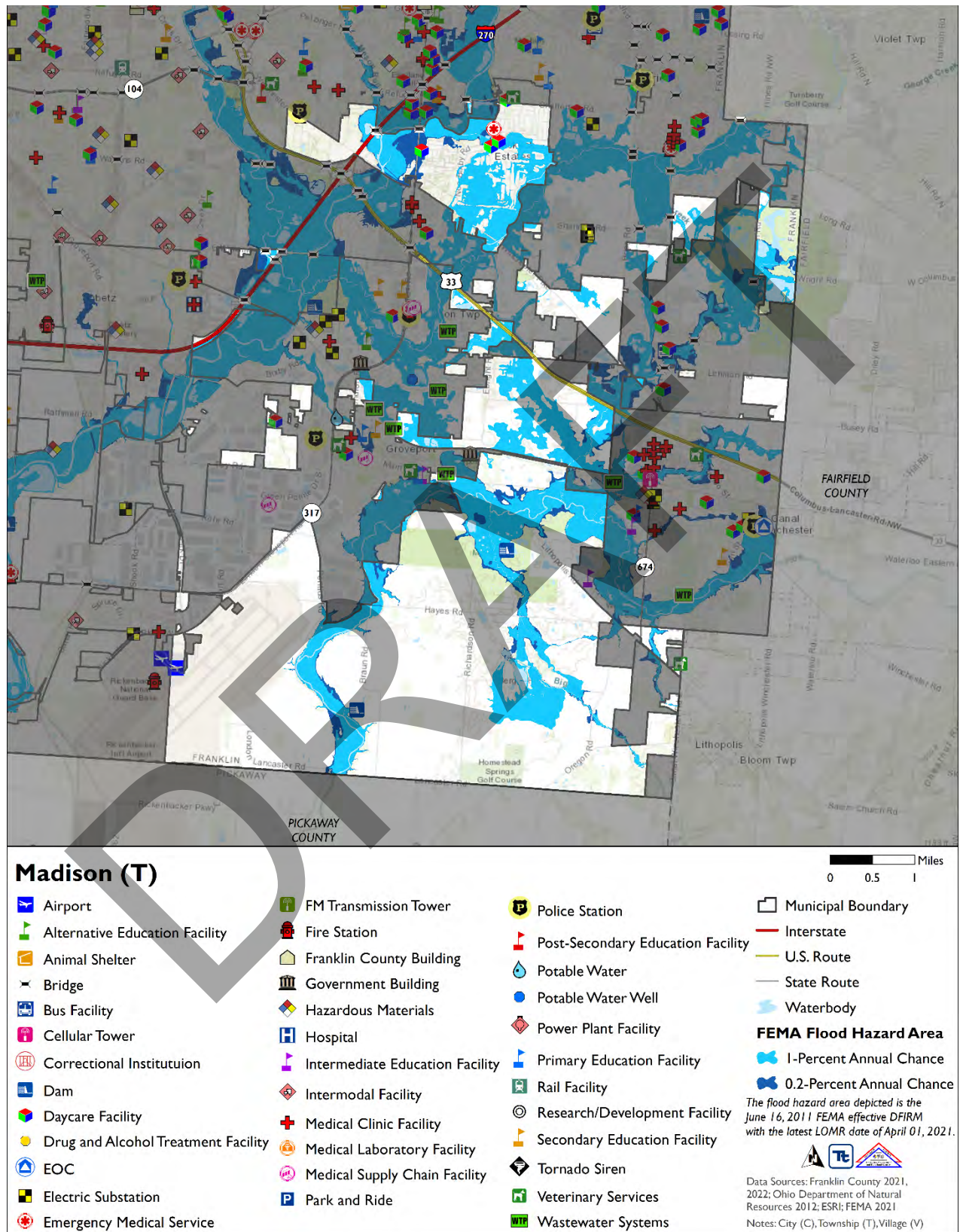


Figure 9.21-3. Madison Township Hazard Area Extent and Location Map - Land Subsidence

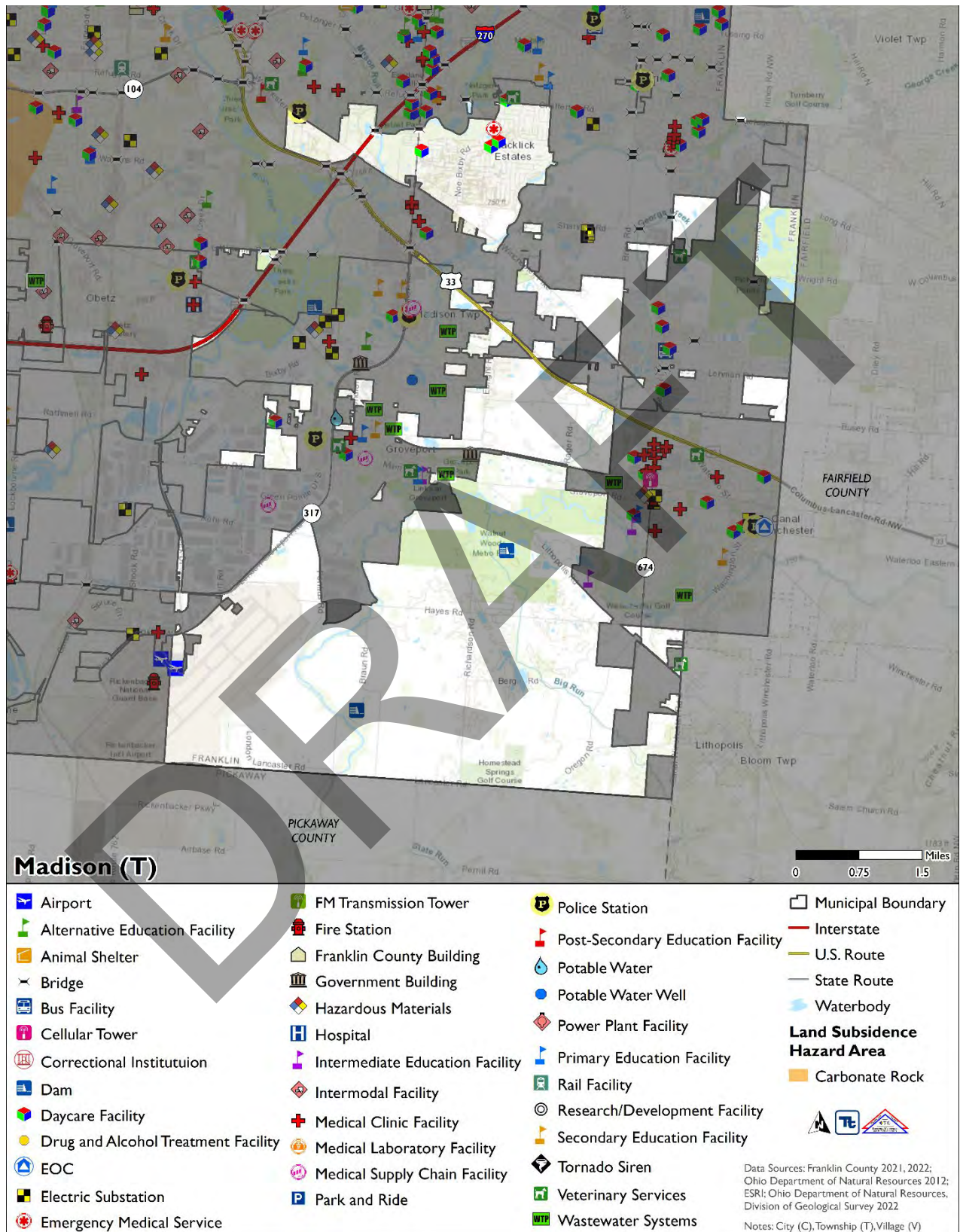
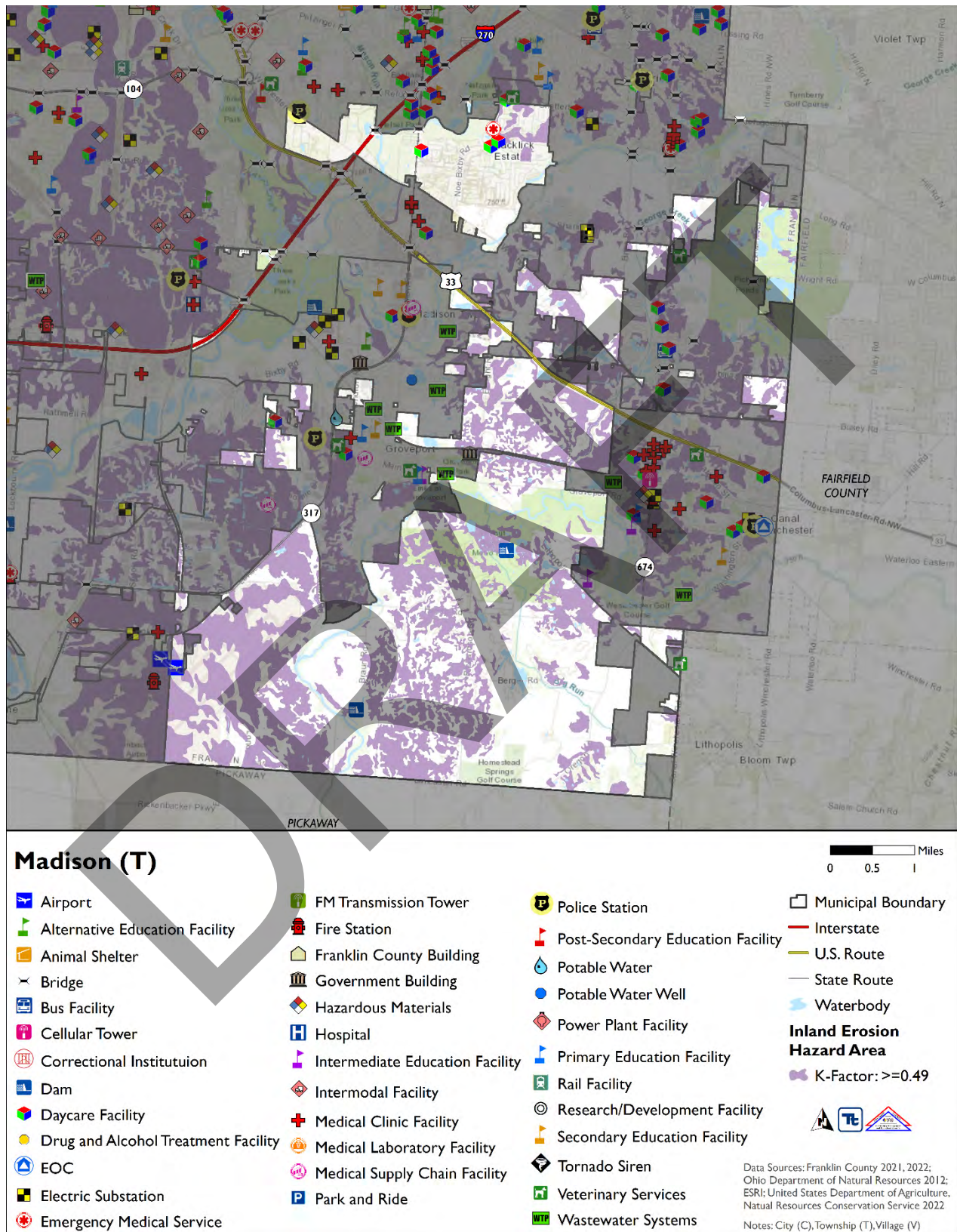


Figure 9.21-4. Madison Township Hazard Area Extent and Location Map - Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Madison Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Madison Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.21-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.
April 29, 2021	Heavy Rains, Flooding	No	Showers and thunderstorms ahead of a cold front produced locally heavy rain across central Ohio during the afternoon hours. Isolated rain event, 3-4 inches of rain in a small area, lots of localized flooding.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for Madison Township. Madison Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Madison Township indicated the following:

- The initial scoring of the Flood hazard (Medium) was increased to 'High', as multiple roadways have had to be closed several times a year due to flooding.

Table 9.21-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperatures	Medium
Flood	High
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.21-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Madison Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	4	2
0.2-Percent Annual Chance Flood Event Hazard Area	5	2
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	3	3
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	2	2
Delaware Dam Inundation (MH Breach) Hazard Area	1	1

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- The basements and first floors of houses in the Township have been flooded from heavy, localized rain storms.
- The Township does not have an emergency shelter identified
- No critical facilities in the Township have back-up power



**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.21.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.21-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for one repetitive loss structure to permanently reduce damage.	Township Trustees Office	No Progress	No	N/A	N/A
Conduct a study on Berger Road and at the intersection of Groveport and Rager to prevent flooding on these emergency response routes. (2 years)	Township Trustees Office	No Progress	No	N/A	N/A
Install tornado sirens in the areas of Madison Township where Franklin County EMA has identified the need for sirens. (20,000 / year)	Township Trustees Office	No Progress	Yes	Certain areas in the Township are not able to clearly hear the sirens.	Township Trustees Office, Franklin County EMA

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Madison Township identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, Madison Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Madison Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.21-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	X	X	-	X	X	X	X	-	-	X
Disease Outbreak	-	-	-	X	-	-	X	-	-	X
Drought	X	X	X	X	X	X	X	X	-	X
Earthquake	X	X	-	X	X	X	X	-	-	X
Extreme Temperatures	-	X	-	X	-	X	X	-	-	X
Flood	X	X	-	X	X	X	X	-	-	X
Geologic	X	X	X	X	X	X	X	X	-	X
Invasive Species	-	-	-	X	-	-	X	-	-	X
Severe Summer Weather	X	X	-	X	X	X	X	-	-	X
Severe Winter Weather	X	X	-	X	X	X	X	-	-	X
Tornado	X	X	-	X	X	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.21-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Madison Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.21-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Madison-01	Tornado Siren Installation	<p>Problem: Certain areas in the Township are not able to clearly hear tornado sirens.</p> <p>Solution: Install tornado sirens in the areas of Madison Township where Franklin County EMA has identified the need for sirens.</p>	Tornado	6	5 years	Township Trustees Office, Franklin County EMA	HMGP	High	Medium	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Madison-02	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: Work with Franklin County EM&HS to provide residents of Madison Township with the necessary information to protect themselves and understand the threats of all hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS and Madison Township Administration	HMGP, Local Funds	High	Low	High	EAP	PI
2023-Madison-03	Storm Maintenance Program Updates	<p>Problem: Local roadways become inundated with flood waters during heavy rainfalls.</p> <p>Solution: Update stormwater maintenance program to include maintenance activities prior to an upcoming storm.</p>	Flood, Severe Summer Weather	3, 6	1 year	Madison Township Public Works	Local Funds	High	Low	High	SIP	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Madison-04	Alert Franklin County Campaign	<p>Problem: Although there are notification methods in place, Madison Township residents may not be informed of the Franklin County text alerts for hazards.</p> <p>Solution: Along with Franklin County EM&HS, assist with the promotion of the text alert system so residents can stay informed and aware of any impending hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species Severe Summer Weather, Severe Winter Weather, Tornadoes	4, 5	2 years	Franklin County EM&HS and Madison Township Administration	HMGP, Local Funds	High	Low	High	EAP	ES
2023-Madison-05	Emergency Shelter Identification	<p>Problem: Madison Township currently does not have a specified location for a shelter in case of emergency.</p> <p>Solution: Identify a location for an emergency shelter which residents can go to in case of an emergency.</p>	Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes	1, 4	5 years	Madison Township Administration	Local Funds	Medium	Low	Medium	LPR	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Madison-06	Critical facility Back-Up Generator	<p>Problem: Although currently undefined, an emergency shelter would need to provide basic needs for residents, including heating and air conditioning. No buildings or facilities in Madison Township currently have back-up power.</p> <p>Solution: Install a back-up/emergency generator and transfer switch to the identified building or facility which will be used as an emergency shelter.</p>	Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes	6	5 years	Madison Township Administration	BRIC, HMGP	Medium	Medium	Medium	SIP	PP, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Madison-07	Drought Contingency Plan	<p>Problem: The Township experiences periods of drought, which results in depleted water supply for crops, soils, and residents drinking water.</p> <p>Solution: The Township will develop a Drought Contingency Plan to address the different degrees of drought, water shortage, and expansive soil problems.</p>	Drought, Geologic	1	3 years	Madison Township Administration, Franklin County Soil and Water Conservation District	Local and County Funds	Medium	Low	Low	LPR, NSP, EAP	PR, NR
2023-Madison-08	Native Landscaping Requirements	<p>Problem: Non-native landscaping can be damaged by drought.</p> <p>Solution: The Township will work with the Franklin County Building Department to establish landscape requirements that include native landscaping to better withstand drought.</p>	Drought, Geologic	1	2 years	Madison Township Administration and Public Works, Franklin County Building Department	Local and County Funds	Low	Low	Low	LPR, NSP	PR, NR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Madison-09	Debris Management Plan	<p>Problem: The Township does not have an overarching Debris Management Plan to coordinate clean-up of debris after hazard events.</p> <p>Solution: The Township will work with the Franklin County EM&HS to develop a debris management plan as a framework for organizing the rapid, safe, and cost-effective separation, removal, collection, recycling, and disposal of debris after a disaster. This plan will include goals to minimize debris-related threats to public health, safety, and the environment following any hazard event.</p>	Dam/Levee Failure, Earthquake, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes	1	4 years	Madison Township Administration and Public Works, Franklin County EM&HS	Local and County Funds	Medium	Low	Medium	LPR	PR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

Potential FEMA HMA Funding Sources:

Timeline:



CRS	Community Rating System	FMA	Flood Mitigation Assistance Grant Program
FEMA	Federal Emergency Management Agency	HMGP	Hazard Mitigation Grant Program
HMA	Hazard Mitigation Assistance	BRIC	Building Resilient Infrastructure and Communities Program
N/A	Not applicable		
NFIP	National Flood Insurance Program		

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.21-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Madison-01	Tornado Siren Installation	1	0	1	1	1	1	0	0	1	0	0	1	1	1	9	High
2023-Madison-02	All-Hazards Education Campaign	1	0	1	1	1	1	1	0	1	1	1	1	0	0	10	High
2023-Madison-03	Storm Maintenance Program Updates	0	0	1	1	1	1	1	1	1	1	1	1	1	0	11	High
2023-Madison-04	Alert Franklin County Campaign	1	0	1	1	1	1	1	0	1	0	1	1	0	0	9	High
2023-Madison-05	Emergency Shelter Identification	1	0	1	1	0	1	1	0	0	1	1	1	0	0	8	High
2023-Madison-06	Critical facility Back-Up Generator	0	1	1	1	0	1	0	-1	0	0	1	1	0	0	5	Medium
2023-Madison-07	Drought Contingency Plan	0	0	1	1	0	1	0	1	0	-1	1	1	-1	0	4	Low
2023-Madison-08	Native Landscaping Requirements	0	0	1	1	0	1	0	1	0	-1	1	1	-1	0	4	Low
2023-Madison-09	Debris Management Plan	0	0	1	1	0	1	0	0	0	0	1	1	0	0	5	Medium

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.22 VILLAGE OF MARBLE CLIFF

This section presents the jurisdictional annex for the Village of Marble Cliff that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Marble Cliff participated in the planning process, an assessment of the Village of Marble Cliff's risk and vulnerability, the different capabilities used in the Village of Marble Cliff, and an action plan that will be implemented to achieve a more resilient community.

9.22.1 Hazard Mitigation Planning Team

The Village of Marble Cliff identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village of Marble Cliff departments, including the Fiscal Department and Engineer. The Assistant Fiscal Officer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.22-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Peggy Shanahan, Assistant Fiscal Officer	Name/Title:	Stephanie Evans, Fiscal Officer
Address:	1600 Fernwood Avenue Columbus, OH 43212	Address:	1600 Fernwood Avenue Columbus, OH 43212
Phone Number:	614-486-6993	Phone Number:	614-486-6993
Email:	admin@marblecliff.org	Email:	fiscal@marblecliff.org
NFIP Floodplain Administrator			
Name/Title:	Joshua Ford, PE, Project Engineer, Burgess & Niple, Inc.		
Address:	330 Rush Alley Suite 700 Columbus, OH 43215		
Phone Number:	614-459-2050 x1242		
Email:	joshua.ford@burgessniple.com		
Additional Contributors:			
Name/Title:		No additional contributors	

Primary Point of Contact	Alternate Point of Contact
Method of Participation:	

9.22.2 Municipal Profile

The Village of Marble Cliff is located in the west-central portion of Franklin County, just three miles northwest of downtown Columbus, sitting on the eastern shore of the Scioto River. The village is bordered on three sides by the cities of Upper Arlington, Grandview Heights, and Columbus.

According to the American Community Survey, the 2021 population for the Village of Marble Cliff was 782, a 36.47 percent increase from the 2010 Census population of 573. Data from the 2021 American Community Survey indicates that 2.8 percent of the population is 5 years of age or younger and 23.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.22.3 Jurisdictional Capability Assessment and Integration

The Village of Marble Cliff performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Marble Cliff to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Marble Cliff and field provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.22-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Chapter 150 Building Regulations; BOCA National Fire Prevention Code.	Local	Grandview Heights
<i>How does this reduce risk?</i> The Village has adopted the Ohio Basic Building Code of Ohio to ensure new development and redevelopment meets modern design standards. The Village has adopted the BOCA National Fire Prevention Code.				
Zoning/Land Use Code	Yes	Chapter 154 Zoning Code	Local	Village Council
<i>How does this reduce risk?</i> This Zoning Ordinance is adopted to promote and protect the public health, safety, comfort, prosperity and general welfare by regulating and limiting the use of land areas and building and the erection, restoration and alteration of buildings and the use thereof for residential and business purposes; to regulate the area dimensions of land, yards and open spaces so as to secure adequate light, air and safety from fire and other dangers; to lessen or avoid congestion in the public streets; to regulate and restrict the bulk, height, design, percent of lot occupancy and the location of buildings; to protect the character of the existing residential, business, and public areas and to assure their orderly and beneficial development; to provide for the orderly growth and development of lands, and for the purpose of dividing the Village into various districts.				
Subdivision Ordinance	Yes	Chapter 153 Subdivision Regulation	Local	Village Council
<i>How does this reduce risk?</i> Each subdivision of land within the Village shall be shown upon a plat and submitted to the Council for approval or disapproval. No individual, partnership, or corporation shall deepen, widen, fill, reroute, or change the course or location of any existing ditch, stream or drain without first obtaining permission from the Council. Plans for such deepening, widening, filling rerouting, or changing the location of any existing ditch, stream or drain shall comply with the specifications of the Council and construction shall be under the supervision of the Village Engineer.				
Site Plan Ordinance	Yes	Chapter 153 Subdivision Regulation	Local	Village Council
<i>How does this reduce risk?</i> See Subdivision Ordinance				
Stormwater Management Ordinance	Yes	Chapter 52 Stormwater Management; Chapter 155 Erosion and Sediment Control	Local	Public Works
<i>How does this reduce risk?</i> The purpose of Chapter 52 Stormwater Management is to establish minimum stormwater management requirements and controls for the continued operation and maintenance of stormwater drainage systems in order to ensure the health, safety, and general welfare of the citizens of the Village. This chapter seeks to meet that purpose through the following objectives: (1) Minimize increases in stormwater runoff from any development in order to reduce flooding, siltation and streambank erosion and maintain the integrity of stream channels. (2) Minimize increases in nonpoint source pollution caused by stormwater runoff from development that would otherwise degrade local water quality. (3) Minimize the total annual volume of surface water runoff that flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable. (4) Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety. The purpose of Chapter 155 Erosion and Sediment Control is to safeguard persons, protect property, prevent damage to the environment and promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity which disturbs or breaks the topsoil or results in the movement of earth on land in the Village.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 152 Flood Damage Prevention	Local	Village Engineer
<i>How does this reduce risk?</i> It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (A) Protect human life and health; (B) Minimize expenditure of public money for costly flood control projects; (C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (D) Minimize prolonged business interruptions; (E) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; (F) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas; (G) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Chapter 34 Civil Emergency	Local	-
<i>How does this reduce risk?</i> The chapter grants the mayor the ability to declare civil emergencies (Any natural or man-made calamity, disaster, or condition including but not limited to flood, conflagration, cyclone, tornado, earthquake, explosion, or other environmental condition existing within the corporate limits of the Village which poses a threat to the health, safety, and welfare of the public and/or threatens the destruction of property, to such an extent that extraordinary measures must be taken in order to preserve order and protect persons and property). After proclamation of a civil emergency, the Mayor may also in the interest of public safety and welfare make any of the following orders: (A) Order the closing of a business or residence when occupancy of the same would present a clear and immediate danger to its occupants or invitees. (B) Issue other such orders as are imminently necessary for the protection of life and property. (C) Issue such orders as are necessary for the health, safety, and welfare of the public.				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Strategic Plan, The Village of Marble Cliff, Ohio, June 2015	Local	Village Council
<i>How does this reduce risk?</i> The Plan identifies Village strengths and challenges and includes a land use map.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Marble Cliff to oversee and track development.

Table 9.22-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Village Council approves; Grandview Heights coordinates permitting and inspecting.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	SFHA
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	The Village is largely built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Marble Cliff and their current responsibilities that contribute to hazard mitigation.

Table 9.22-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Public Works/Highway Department	Yes	Public Works
Construction/Building/Code Enforcement Department	Yes	Building Department
Emergency Management/Public Safety Department	Yes	The Village contracts with the City of Grandview Heights for police and fire protection.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Siren at church – tested every Wednesday at noon
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Grandview Heights Service Department crews will collect yard waste for Marble Cliff residents each Monday from April through the end of November. Leaves are collected from the tree lawn curb strip during October and November. The Village will pay for removal of trees and limbs in the “tree line” between the sidewalk and the street.
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	Yes	<p>Beautification Committee: The Committee shall study the problems and determine the needs of the Village in connection with the planting, maintenance, removal, fertilization, pruning and bracing of trees on the tree lawns and other public property in the Village. The Committee may recommend a schedule for the periodic maintenance and planting of trees on tree lawns and other public property. Upon approval by Village Council, the Committee shall administer and implement the maintenance and planting schedule. Property owners will be given notice of the maintenance or planting of trees on the tree lawn bordering their private property. The service of the periodic maintenance may be made available to the property owners for maintenance of trees and private property. The Committee shall inform the Village Council of any tree which, because of age, disease or for any other reason, has become dangerous to the health, safety and welfare of the residents of the Village. The Committee shall also inform the Village Council of any tree, on private property that borders on any street, which has not been pruned or trimmed so as to prevent the obstruction of street signs and street lights, passage of pedestrians on sidewalks, and vision of street and alley intersections. In the event the Village Council is informed of the existence of one of these said conditions, the Council has the power to order said property owner to remove or trim the dangerous tree, whichever is appropriate.</p>
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Grant writer(s)	Yes	Grant writing performed as needed by full-time or contracted Village staff.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)		

Fiscal Capability

The table below summarizes financial resources available to the Village of Marble Cliff.

Table 9.22-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	ARPA, OPWC – OH Public Works Commission

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Marble Cliff.

Table 9.22-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Contracted out
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Siren at church – tested every Wednesday at noon
Natural disaster/safety programs in place for schools	No	All Marble Cliff children go to Grandview Heights schools
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Marble Cliff.

Table 9.22-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.22-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.22.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Marble Cliff.

Table 9.22-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Marble Cliff (V)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Marble Cliff.

Table 9.22-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	-
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	-
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	-
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements

NFIP Topic	Comments
	to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	-
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Burgess & Niple
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	-
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	-
What are the barriers to running an effective NFIP program in the community, if any?	None identified
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	None that the Village is aware of
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unsure
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	152.25, 152.26, 152.27
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meet
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Marble Cliff does not have development in the floodplain
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.22.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.22-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0

Table 9.22-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None identified					
Known or Anticipated Major Development in the Next Five (5) Years					
The Packard	Residential	30	2015 W Fifth Avenue 143-000066-00	None	Planning

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.22.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Marble Cliff's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Marble Cliff has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.22-1. Village of Marble Cliff Hazard Area Extent and Location Map-Flood

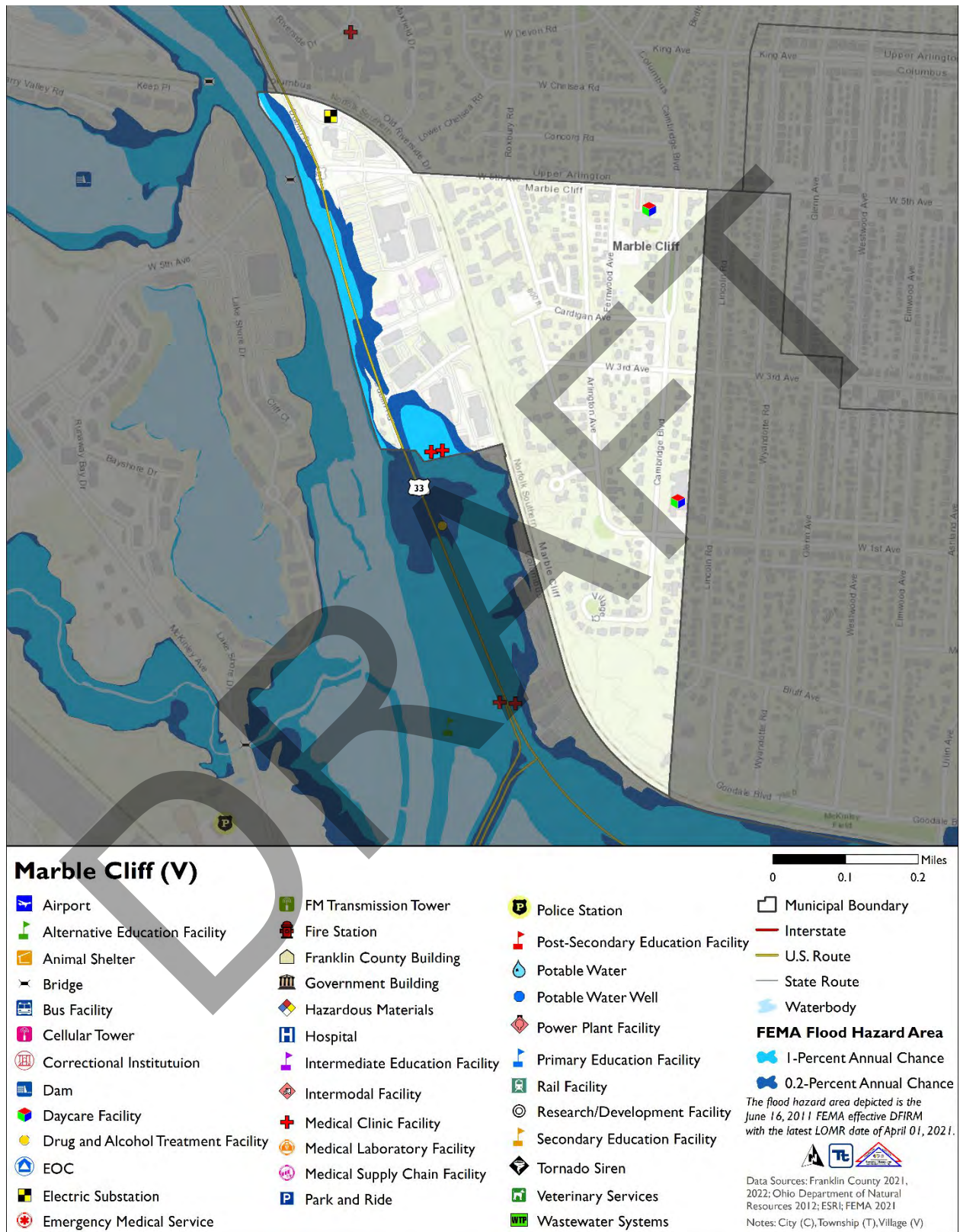


Figure 9.22-2. Village of Marble Cliff Hazard Area Extent and Location Map-Inland Erosion

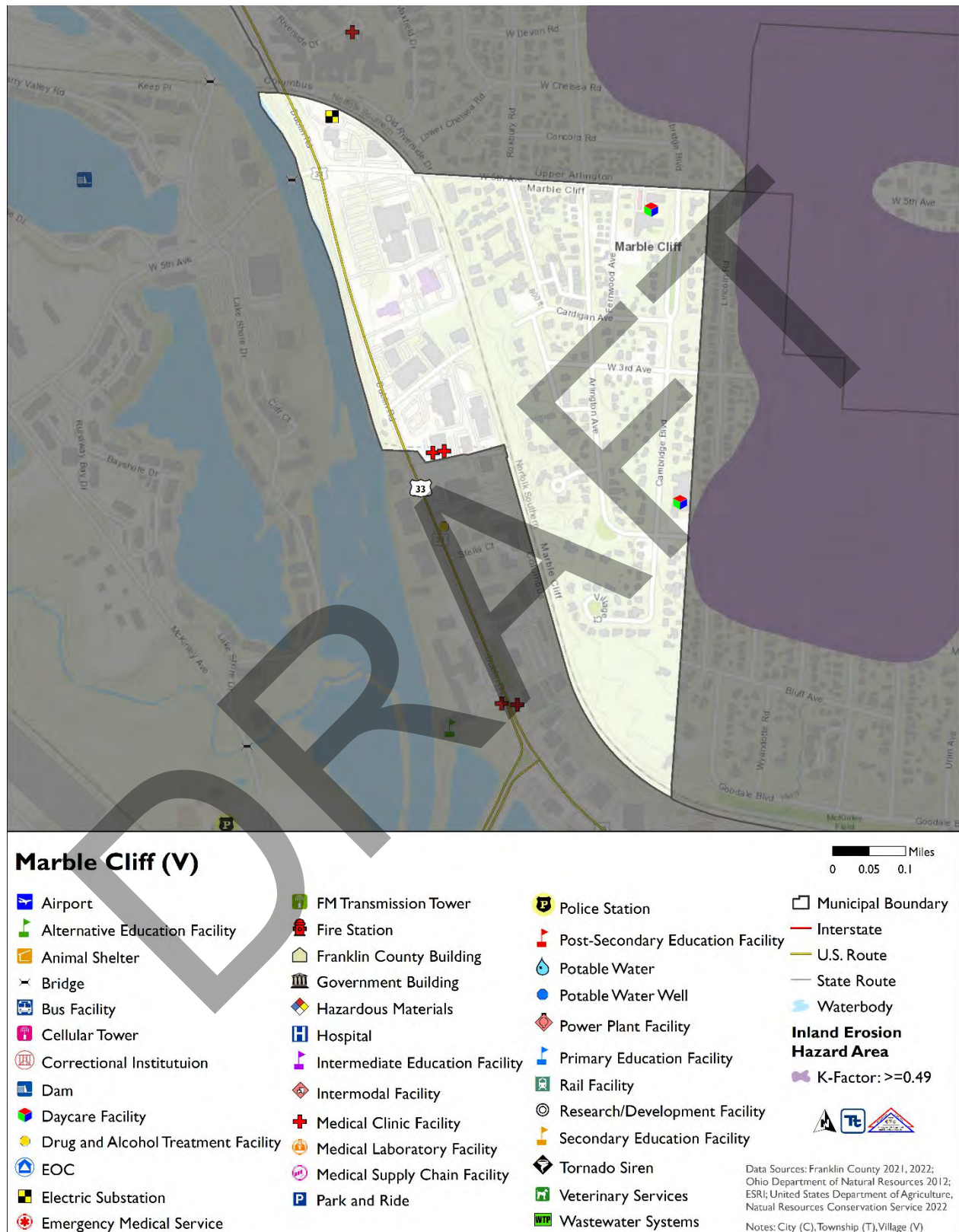
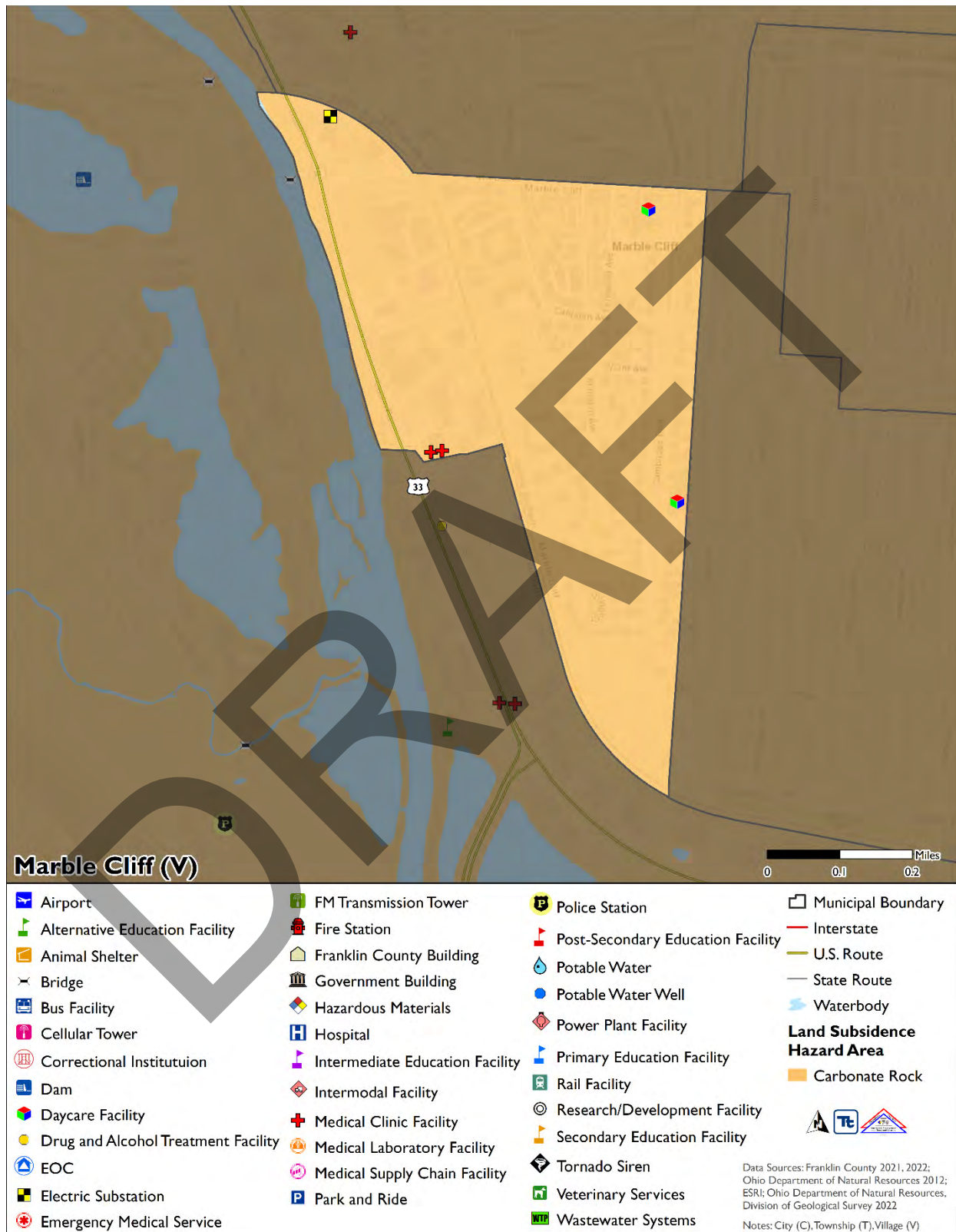


Figure 9.22-3. Village of Marble Cliff Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Marble Cliff's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Marble Cliff experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.22-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Although the County was impacted, the Village did not report damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Although the County was impacted, the Village did not report damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village was subject to closures and masking/social distancing requirements.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Marble

Cliff. The Village of Marble Cliff reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.22-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.22-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Marble Cliff

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	2	2
0.2-Percent Annual Chance Flood Event Hazard Area	2	2
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	5	3
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- The Village does not have a hazard alert system implemented in Village public facilities throughout the Village to notify residents that utilize the facilities.
- The Village does not currently have a Post- Disaster Recovery Plan in place to ensure that the Village population can recover from hazard impacts.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Mount Carmel Medical Group Tri Village
 - Northeast Dermatology D/B/A Skin Dermat*
- The Village's native species are at risk from invasive species which may harm local ecosystems.



**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.22.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.22-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2,000 / 3 months)	Village Administration and Mayor's office	No Progress	Yes	Critical facilities require important weather alerts	Village Administration and Mayor's office
Use a third party system to email residents in the event of an emergency. (zero funding, ongoing)	Village Administration and Mayor's office	Ongoing Capability. The Village uses the Grandview Heights mass notification and 311 systems	No	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Marble Cliff identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Marble Cliff participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.22-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	-	X	-	-	-	X
Disease Outbreak	X	-	-	X	-	X	-	-	-	X
Drought	X	-	-	X	-	X	-	-	-	X
Earthquake	X	-	-	X	-	X	-	-	-	X
Extreme Temp	X	-	-	X	-	X	-	-	-	X
Flood	X	X	-	X	-	X	-	-	X	X
Geologic	X	-	-	X	-	X	-	-	-	X
Invasive Species	X	-	X		-	X	-	X	-	-
Severe Summer Weather	X	-	-	X	-	X	-	-	-	X
Severe Winter Weather	X	-	-	X	-	X	-	-	-	X
Tornado	X	-	-	X	-	X	-	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.22-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Marble Cliff will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.22-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Village of Marble Cliff-001	NOAA Weather Alert Radios	<p>Problem: The Village does not have a hazard alert system implemented in Village public facilities throughout the Village to notify residents that utilize the facilities.</p> <p>Solution: The Village will purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public to notify them of incoming hazards.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	5	3 months	Village Administration and Mayor's office	FEMA, BRIC, HMGP	Facilities that hold a significant amount of people will have quick access to knowledge of an incoming hazard.	\$2,000	High	EAP	ES
2023-Village of Marble Cliff-002	Post-Disaster Recovery Plan	<p>Problem: The Village does not currently have a Post-Disaster Recovery Plan in place to ensure that the Village population can recover from hazard impacts.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood,	1	1 Year	Village Administration and Mayor's office	FEMA, BRIC, HMGP, FMA	Residents and Village administration will be better prepared to complete post disaster recovery	>\$5,000	High	LPR	PP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The Village will develop a Post- Disaster Recovery Plan that integrates the updated Hazard Mitigation Plan to protect people from the hazards of concern.	Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado					measures after a hazard.				
2023-Village of Marble Cliff-003	Flood Vulnerability Evaluation	Problem: The following critical facilities are municipally owned and located in the special flood hazard area: <ul style="list-style-type: none"> Mount Carmel Medical Group Tri Village Northeast Dermatology D/B/A Skin Dermat* Solution: The Village will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include: <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers 	Flood	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	Critical facilities will be able to continue to operate and will not flood as often.	TBD after feasibility assessment	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Once the most cost-effective option is identified, the Village will carry out the option.										
2023-Village of Marble Cliff-004	Invasive Species Prevention	<p>Problem: The Village's native species are at risk from invasive species which may harm local ecosystems.</p> <p>Solution: The Village will create and distribute guides to the community through social media and physical print, warning residents of certain species of plants that are considered urban forestry. Additionally, The Village will engage in a social media campaign to educate the Village on how to not to bring in pests and vegetation that may pose a threat.</p>	Invasive Species	5	6 months	Department of Community Relations Department of Service, Division of Urban Forestry	Village Budget	The Village will ensure residents are more knowledgeable.	\$1,000	High	NSP	NR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.22-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Village of Marble Cliff-001	NOAA Weather Alert Radios	1	1	1	1	1	1	1	0	1	1	1	1	1	0	12	High
2023-Village of Marble Cliff-002	Post-Disaster Recovery Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Village of Marble Cliff-003	Flood Vulnerability Evaluation	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2023-Village of Marble Cliff-004	Invasive Species Prevention	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

DRAFT

SECTION 9. JURISDICTIONAL ANNEXES

9.23 TOWNSHIP OF MIFFLIN

This section presents the jurisdictional annex for the Township of Mifflin that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Mifflin participated in the planning process, an assessment of the Township of Mifflin's risk and vulnerability, the different capabilities used in the Township of Mifflin, and an action plan that will be implemented to achieve a more resilient community.

9.23.1 Hazard Mitigation Planning Team

The Township of Mifflin identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Mifflin departments, including the Township administration. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.23-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Nancy White/ Township Administrator	Name/Title:	-
Address:	400 West Johnstown Road, Suite 200 Gahanna, OH 43230	Address:	-
Phone Number:	(614) 471-4494	Phone Number:	-
Email:	whiten@mifflin-oh.gov	Email:	-
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.23.2 Municipal Profile

Township of Mifflin is in the northeast of Franklin County and runs along Interstate 270 to its west with proximity to the John Glenn Columbus International Airport. Most of what was once Mifflin Township has since been annexed by the cities of Gahanna in the east and Columbus in the north, west, and south.

According to the American Community Survey, the 2021 population for the Township of Mifflin was 38,121, a 6.75 percent increase from a population of 35,710 from the 2010 Census. Data from the 2020 U.S. Census indicate that 5.6 percent of the population is 5 years of age or younger and 16.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.23.3 Jurisdictional Capability Assessment and Integration

The Township of Mifflin performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Mifflin to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Mifflin and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.23-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	-	-	-
<i>How does this reduce risk?</i>				
Zoning/Land Use Code	Yes	-	-	-
<i>How does this reduce risk?</i>				
Subdivision Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Consider the following: <ul style="list-style-type: none"> • Are environmental systems that protect development from hazards identified and mapped? • Do environmental policies maintain and restore protective ecosystems? • Do the ordinances prohibit development within, or filling of, wetlands, floodways, and floodplains? • Do environmental policies provide incentives to development that is located outside protective ecosystems? 				
Flood Damage Prevention Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Clinton-Mifflin Land Use Plan	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p><i>Consider the following:</i></p> <ul style="list-style-type: none"> Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? Does the future land use map clearly identify natural hazard areas? Do the land use policies discourage development or redevelopment with natural hazard areas? Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas? 				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County and Township Stormwater Management Program 2014 – 2019	Local	Franklin County Stormwater Partnership
<p><i>How does this reduce risk?</i></p> <p>The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment.</p>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Consider the following:				
<ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? 				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Mifflin to oversee and track development.

Table 9.23-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? 	No	Franklin County does this for the Township
If you do not issue development permits, what is your process for tracking new development?	N/A	Franklin County
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe 	N/A	-

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Mifflin and their current responsibilities that contribute to hazard mitigation.

Table 9.23-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	Yes	Mifflin township residents and businesses can apply for permits through the Franklin County Economic Development and Planning Department.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Mifflin township residents and businesses can apply for permits through the Franklin County Economic Development and Planning Department.
Public Works/Highway Department	Yes	<p>The Mifflin Township Service Department is responsible for the basic upkeep and maintenance of public roadway, bridges, storm water systems and road signage, code enforcement, and care and maintenance of two Mifflin Township's two cemeteries, fire stations and other township property.</p> <p>The Mifflin Township Division of Service team salts roads in the winter, removes debris from roadways after a storm, tags houses for code violations, overseeing community clean-up days, overseeing burials in one of the two Mifflin cemeteries or fixing a gutter at one of the Township's four fire stations.</p> <p>Funded by the Township Road and Bridge Fund, the State Motor Vehicle License tax and the State Gasoline tax, the Division of Service works in partnership on road issues with municipal, county and state programs to improve the infrastructure and ensure the critical service in the unincorporated community.</p>
Construction/Building/Code Enforcement Department	Yes	The Division of Service works in conjunction with Franklin County Code Enforcement and the Franklin County Board of Health to address various code violations. Township staff responds to complaints and patrols neighborhoods for high grass, weeds, trash and other waste, inoperable cars, in addition to working with agencies to improve abandoned properties or vacant houses.
Emergency Management/Public Safety Department	Yes	<p>Mifflin Township Police Department.</p> <p>The Mifflin Township Division of Fire provides fire and emergency medical services (EMS) to the City of Gahanna and the unincorporated portion of the Township.</p>

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Franklin County's Alert System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stormwater Program: The Franklin County Stormwater Partnership and program was initiated in 2003 to join programs related to drainage management, water quality management and stormwater regulation compliance.
Mutual aid agreements	Yes	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Township of Mifflin.

Table 9.23-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	The Division of Service is funded by the Township Road and Bridge Fund, the State Motor Vehicle License tax, and the State Gasoline tax.

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Mifflin.

Table 9.23-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Information on the stormwater management program is present on the Township website.
Social media for hazard mitigation education and outreach	-	-
Citizen boards or commissions that address issues related to hazard mitigation	-	-
Warning systems for hazard events	Yes	Franklin County's Alert System
Natural disaster/safety programs in place for schools	-	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	-	-

Community Classifications

The table below summarizes classifications for community programs available to the Township of Mifflin.

Table 9.23-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.

- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.23-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.23.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Mifflin.

Table 9.23-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Mifflin (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Mifflin.

Table 9.23-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	-

NFIP Topic	Comments
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	-
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	-
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	-
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	-
NFIP Compliance	
What local department is responsible for floodplain management?	-
Are any certified floodplain managers on staff in your jurisdiction?	-
Do you have access to resources to determine possible future flooding conditions from climate change?	-
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	-
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	-
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	-
What are the barriers to running an effective NFIP program in the community, if any?	-
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	-
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	-
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	-
Does your floodplain management program meet or exceed minimum requirements?	-

NFIP Topic	Comments
<ul style="list-style-type: none"> If exceeds, in what ways? 	
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	-
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	-

9.23.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.23-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.23-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.23.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Mifflin's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be



identified clearly using mapping techniques and technologies and for which the Township of Mifflin has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.23-1. Township of Mifflin Hazard Area Extent and Location Map-Flood

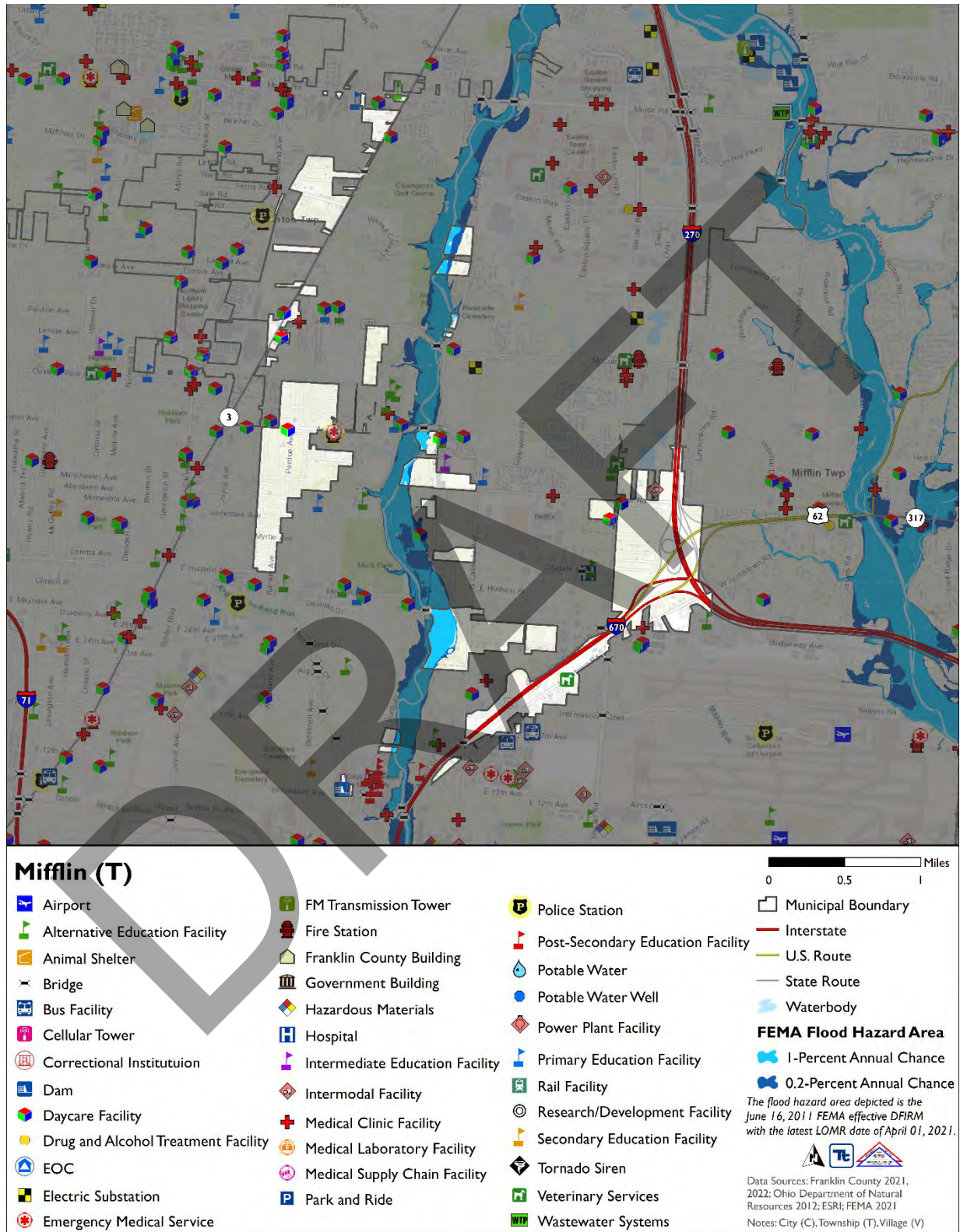


Figure 9.23-2. Township of Mifflin Hazard Area Extent and Location Map-Inland Erosion

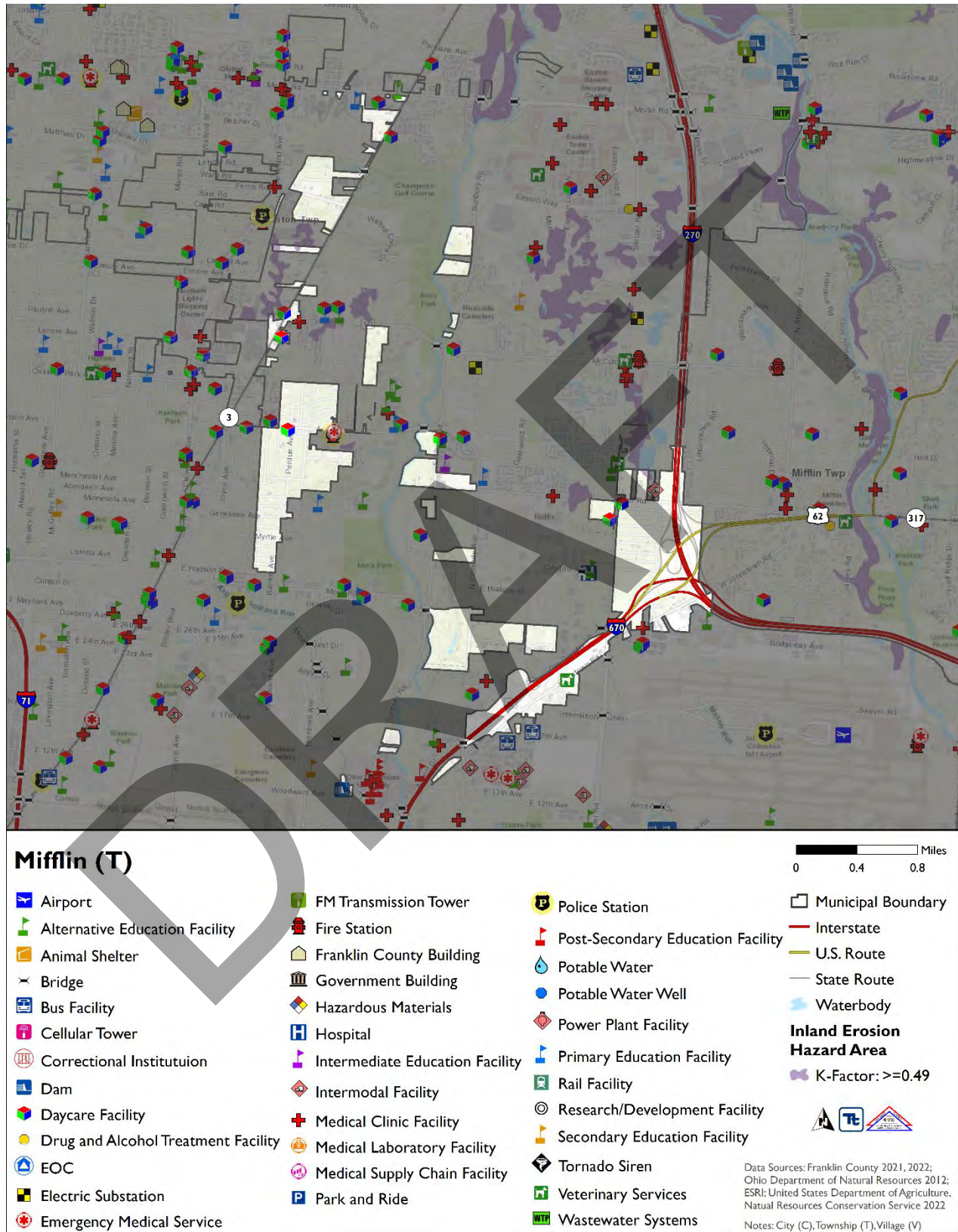
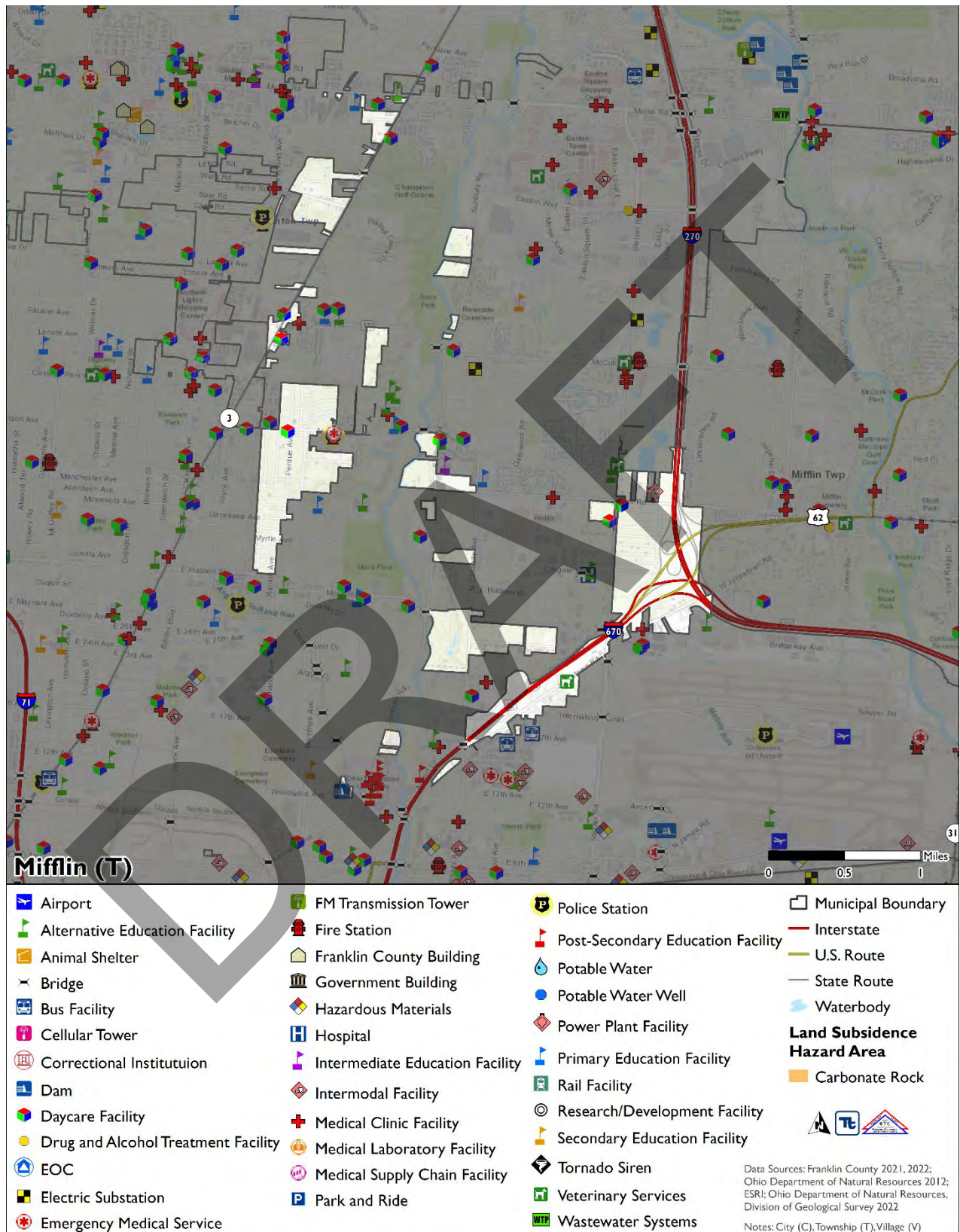


Figure 9.23-3. Township of Mifflin Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

Mifflin Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Mifflin Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.23-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Village did not experience additional losses and damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Village did not experience additional losses and damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village was subject to closures and masking/social distancing requirements.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Mifflin.

The Township of Mifflin reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.23-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic (Erosion)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.23-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Township of Mifflin

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	1	1
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Mifflin Township identified the following vulnerabilities within its community:

- The Township does not currently have hazard mitigation information available on their website for easy access to residents.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.23.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.



Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the ‘Capability Assessment’ earlier in this annex.

DRAFT

Table 9.23-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for public information including outreach projects and technical assistance to property owners. (5,000 / 1 year)	Township Trustees Office	-	-	-	-
Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (5,000 / 1 year)	Township Trustees Office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Mifflin identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Township of Mifflin has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Mifflin participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.23-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	-	-	X	-	-	X
Disease Outbreak	X	-	-	X	-	-	X	-	-	X
Drought	X	-	-	X	-	-	X	-	-	X
Earthquake	X	-	-	X	-	-	X	-	-	X
Extreme Temp	X	-	-	X	-	-	X	-	-	X
Flood	X	-	-	X	-	-	X	-	-	X
Geologic (Erosion)	X	-	-	X	-	-	X	-	-	X
Invasive Species	X	-	-	X	-	-	X	-	-	X
Severe Summer Weather	X	-	-	X	-	-	X	-	-	X
Severe Winter Weather	X	-	-	X	-	-	X	-	-	X
Tornado	X	-	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.23-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Mifflin Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.23-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Township of Mifflin-001	Hazard Information Website Update	<p>Problem: The Township does not currently have hazard mitigation information available on their website for easy access to residents.</p> <p>Solution: The Township will develop a hazard mitigation part on their website that explains how to mitigate and prepare for a hazard. Additionally, the Township will use the website and social media to double as a warning system for hazard events for residents.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	1 Year	Township Administration	Township Budget	The residents of the Township will be better protected and prepared from hazards of concern.	\$1,000	High	EAP	ES, PI
2023-Township of Mifflin-002	Continuity of Operations Plan	<p>Problem: The Township does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern</p> <p>Solution: The Township will develop a Continuity of Operations Plan that will address the hazards of concern.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species,	5	1 Year	Township Administration	Township Budget	The Township will be better prepared to perform continuity of operations after a hazard event.	Staff Time	High	LPR	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Severe Summer Weather, Severe Winter Weather, Tornado									

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.23-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Township of Mifflin-001	Hazard Information Website Update	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-Township of Mifflin-002	Continuity of Operations Plan	1	1	1	1	1	1	1	0	1	1	1	1	1	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.24 VILLAGE OF MINERVA PARK

This section presents the jurisdictional annex for the Village of Minerva Park that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Minerva Park participated in the planning process, an assessment of the Village of Minerva Park's risk and vulnerability, the different capabilities used in the Village of Minerva Park, and an action plan that will be implemented to achieve a more resilient community.

9.24.1 Hazard Mitigation Planning Team

The Village of Minerva Park identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village departments, including the Mayors Assistant. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.24-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Tiffany Southard, Mayor	Name/Title:	Mayors Assistant
Address:	2829 Minerva Lake Road Columbus OH 43231	Address:	2829 Minerva Lake Road Columbus OH 43231
Phone Number:	614-882-5743	Phone Number:	614-882-5743
Email:	mayor@minervapark.org	Email:	assistantmp@minervapark.org
NFIP Floodplain Administrator			
Name/Title:	Lynn Eisentrout, Mayor		
Address:	2829 Minerva Lake Road, Columbus, OH, 43231		
Phone Number:	(614) 882-5743		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.24.2 Municipal Profile

The Village of Minerva Park, an independent village within Columbus, is located in the north-central portion of Franklin County. The Village also encompasses a lake with a stream that flows into it. The Village began in 1895 as Minerva Amusement Park, an attraction managed by the Columbus Railway Company. The amusement park closed in 1902.

According to the American Community Survey, the 2021 population for the Village of Minerva Park was 1,611, a 26.65 percent increase from the 2010 Census Population of 1,272. Data from the 2021 American Community Survey indicates that 8.9 percent of the population is 5 years of age or younger and 16.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.24.3 Jurisdictional Capability Assessment and Integration

The Village of Minerva Park performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Minerva Park to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Minerva Park and provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.24-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part Fourteen: Building and Housing Code	Local	Building Inspector and Planning and Zoning Clerk
<p><i>How does this reduce risk?</i> There is hereby adopted, for the purpose of establishing rules and regulations for the location, design, materials, construction, repair, equipment, use, occupancy, maintenance, removal and demolition of all structures, except insofar as such matters are otherwise specifically provided for in any other applicable law or ordinance those certain codes known as the Ohio Building Code (OBC) and related codes as adopted by the Ohio Board of Building Standards, Ohio Department of Commerce as published in Division 4101:1 et seq. of the Ohio Administrative Code (OAC), as the same may be amended from time to time.</p>				
Zoning/Land Use Code	Yes	Title Six: Zoning	Local	Planning and Zoning Commission
<p><i>How does this reduce risk?</i> Establishes zoning districts and procedures of the Planning and Zoning Commission.</p>				
Subdivision Ordinance	Yes	Title Four: Subdivision Regulations	Local	Planning and Zoning Commission
<p><i>How does this reduce risk?</i> No plat of any subdivision shall be entitled to be recorded in the County Recorder's office or to have any validity until it has been approved in the manner prescribed in these subdivision regulations. Before preparing and submitting a preliminary plat to the Planning and Zoning Commission, the subdivider or his or her engineer shall consult with the Commission, while the plat is in sketch form, to ascertain the location of proposed streets, parkways, parks, playgrounds, school sites and other planned developments, to acquaint himself or herself with the Commission's requirements and to familiarize himself or herself with the comprehensive plan, the Thoroughfare Plan, the Parks and Open Space Plan, the Zoning Code and the drainage, sewerage and water systems of the Village.</p>				
Site Plan Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Stormwater Management Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Real Estate Disclosure	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Growth Management	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Environmental Protection Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Flood Damage Prevention Ordinance	Yes	Chapter 1276	Local	Village Engineer
<p><i>How does this reduce risk?</i> The following provisions pertaining to the use and development of lands subject to periodic flooding are provided to encourage the use and development of such lands in a manner so as to reduce the perils of flooding and to promote the public health, safety and general welfare.</p> <ul style="list-style-type: none"> Zones. The floodplain shall be divided into two zones as follows: <ul style="list-style-type: none"> (1) Restricted Zone. The floodway necessary to preserve the natural capacity of a channel for flood water; and 				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p>(2) Limited Zone. The low-lying area on each side of the restricted zone where flooding is of sufficient frequency to require proofing of structures against flood loss.</p> <ul style="list-style-type: none"> Zone Boundaries. Zone boundaries shall be determined by the Village Engineer and based upon publications of the Ohio Department of Natural Resources pertaining to floods and other appropriate information. Change of Zone Boundaries. Zone boundaries shall only be decreased subject to the provision of flood control or protection works and a finding by the Village Engineer that such control or protection is adequate to prevent flooding of the land being removed from regulation under this section. Development Standards. In addition to the provisions of the established zoning district, the following standards for the arrangement and development of land and buildings are required under this section. <p>(1) Restricted Zone. Within the restricted zone, the use and development of land shall be conducted in such a manner as not to fill the specified channel or otherwise restrict the flow of flood waters and shall be subject to the approval of the Village Engineer.</p> <p>(2) Limited Zone. Within the limited zone, the use shall be so developed as to proof the use or structure against flood damage, by elevating it above the prescribed level or by other appropriate means, and shall be subject to the approval of the Village Engineer.</p>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Chapter 208 Emergency Management	Local	Administration
<p><i>How does this reduce risk?</i></p> <p>Resolution 1035-88, passed August 30, 1988, of the Board of County Commissioners of Franklin County, Ohio, authorized a written agreement with other political subdivisions, including the Village of Minerva Park, to establish a County-Wide Emergency Management Agency, pursuant to R.C. Ch. 5915, and to continue to provide financial support and funding pursuant to the county-wide agreement. Copies of this resolution and of the agreement may be obtained, at cost, from the Fiscal Officer.</p>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Minerva Park to oversee and track development.

Table 9.24-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Code/Planning
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Minerva Park and their current responsibilities that contribute to hazard mitigation.

Table 9.24-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Planner, Planning and Zoning Commission
Zoning Board of Adjustment	Yes	Planning and Zoning
Planning Department	Yes	Planner
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	Recreation and Parks Committee: <ul style="list-style-type: none"> Makes recommendations to council for the care and maintenance of the Village grounds and facilities including the pool, lakes/ponds, playground, basketball court, shelters and reserves. This is accomplished with support from the Village Administration. Recreation programs and playgrounds Care of Village lands (mowing, tree trimming, planting, etc.) Maintenance of lakes and lake areas Care of trees on Village property other than street rights of way
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Public Works is responsible for services such as curbside leaf collection, snow removal, and maintenance of the stormwater system.
Construction/Building/Code Enforcement Department	Yes	Planner/Code
Emergency Management/Public Safety Department	Yes	Police



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Siren, Nixle, and social media
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Maintenance
Mutual aid agreements	Yes	Police
Human Resources Manual	No	-
Other	Yes	<p>The Safety Committee provides oversight to the Police, Fire, and EMS services of the Village. This is accomplished through regular meetings with the department heads, Mayor and Fiscal Officer. The Committee also works with Code Enforcement specially to review and clarified code ordinances. This is accomplished with support from the Village Administration and code enforcement officer.</p> <p>The Streets Committee makes recommendations for street repair, construction, maintenance programs, refuse collections, mosquito control, leaf pick-up, snow removal; sanitary sewer, storm sewer, general sanitation; oversees street name signs, safety signs, and markings; and maintains trees on street rights of way.</p>
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planner and Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Planner and Engineer
Planners or engineers with an understanding of natural hazards	Yes	Planner and Engineer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planner and Engineer
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	The Village hires out as necessary.
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Minerva Park.

Table 9.24-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Minerva Park.

Table 9.24-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	The Services Committee provides support for effective and timely communications to Village residents. This is accomplished through the support of the Village Administration, Mayor, and residents.
Personnel skilled or trained in website development	Yes	Mayors Assistant
Hazard mitigation information available on your website	Yes	Posted as necessary
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Siren, Nixle, and social media
Natural disaster/safety programs in place for schools	Yes	Provided by WCS
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Social media, email/text blasts

Community Classifications

The table below summarizes classifications for community programs available to the Village of Minerva Park.

Table 9.24-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.24-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.24.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Minerva Park.

Table 9.24-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Minerva Park (V)	1	3	\$9,248.83	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Minerva Park.

Table 9.24-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No areas in the Village are prone to flooding. The Village does not maintain a list of properties that have been damaged by flooding.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No. None.
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	None
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	-
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Village Planner/Code Officer
What are the barriers to running an effective NFIP program in the community, if any?	No
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown

NFIP Topic	Comments
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Chapter 1276
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Meets
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Not at this time

9.24.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.24-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0

Table 9.24-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.24.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Minerva Park's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Minerva Park has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.24-1. Village of Minerva Park Hazard Area Extent and Location Map-Flood

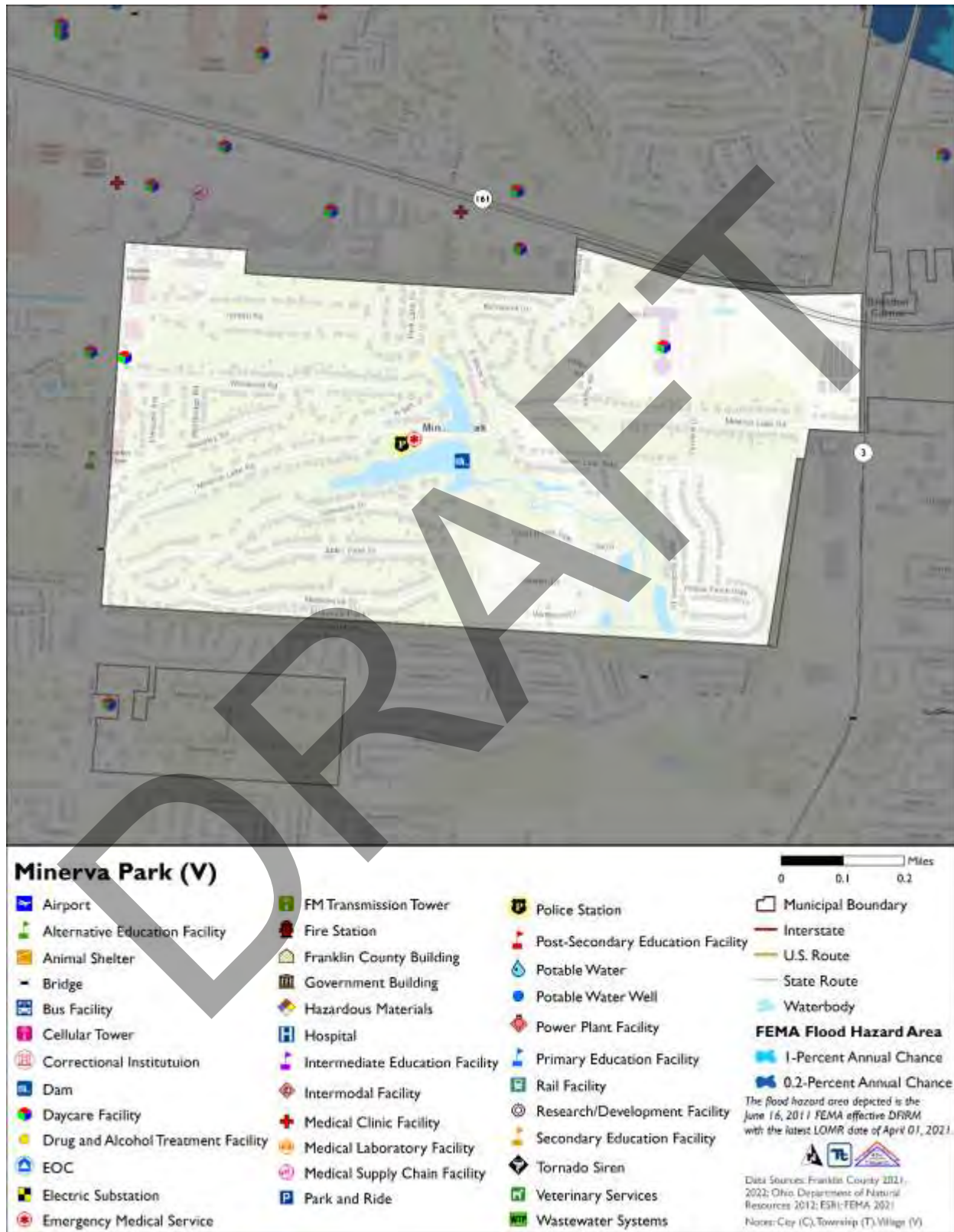


Figure 9.24-2. Village of Minerva Park Hazard Area Extent and Location Map-Inland Erosion

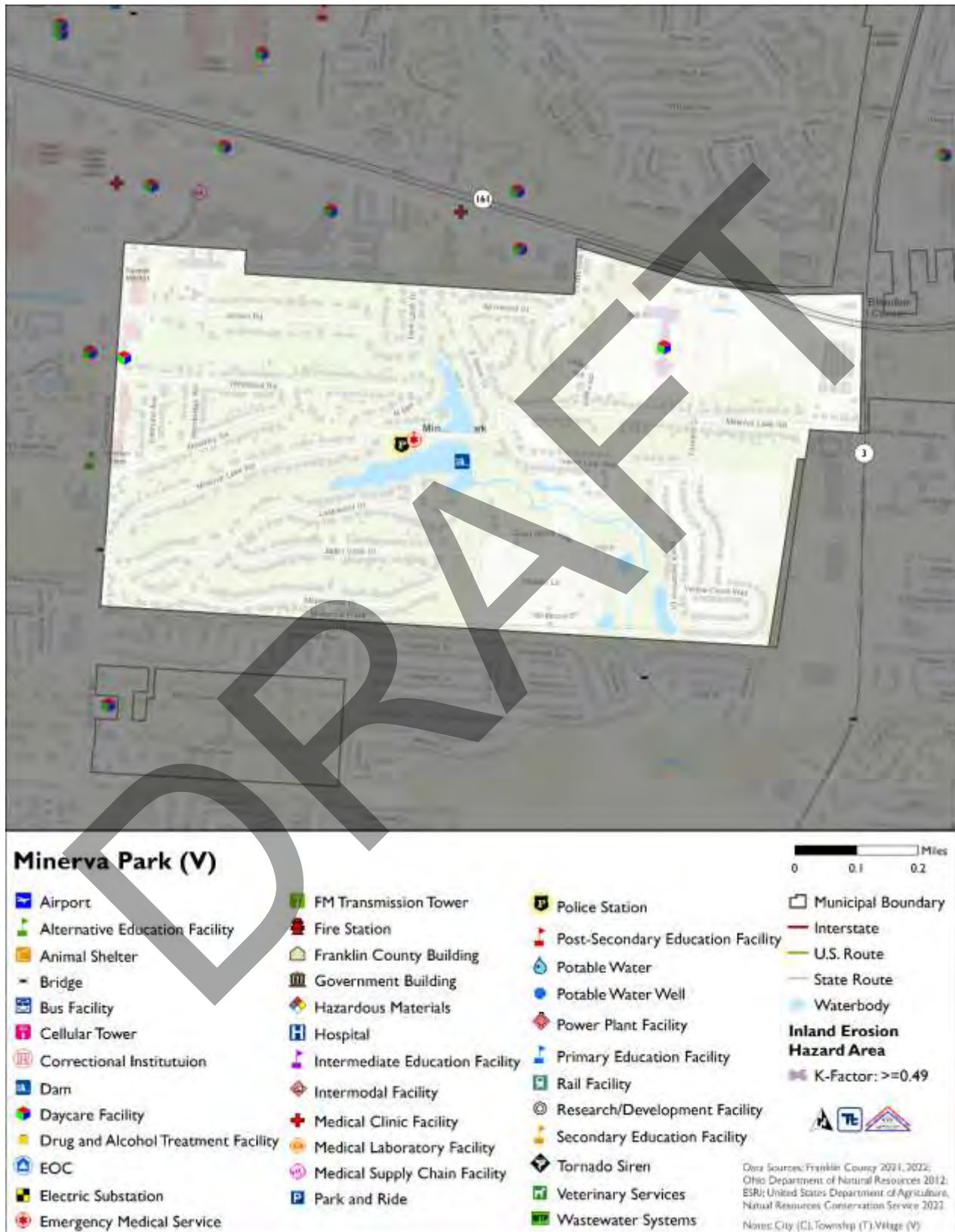
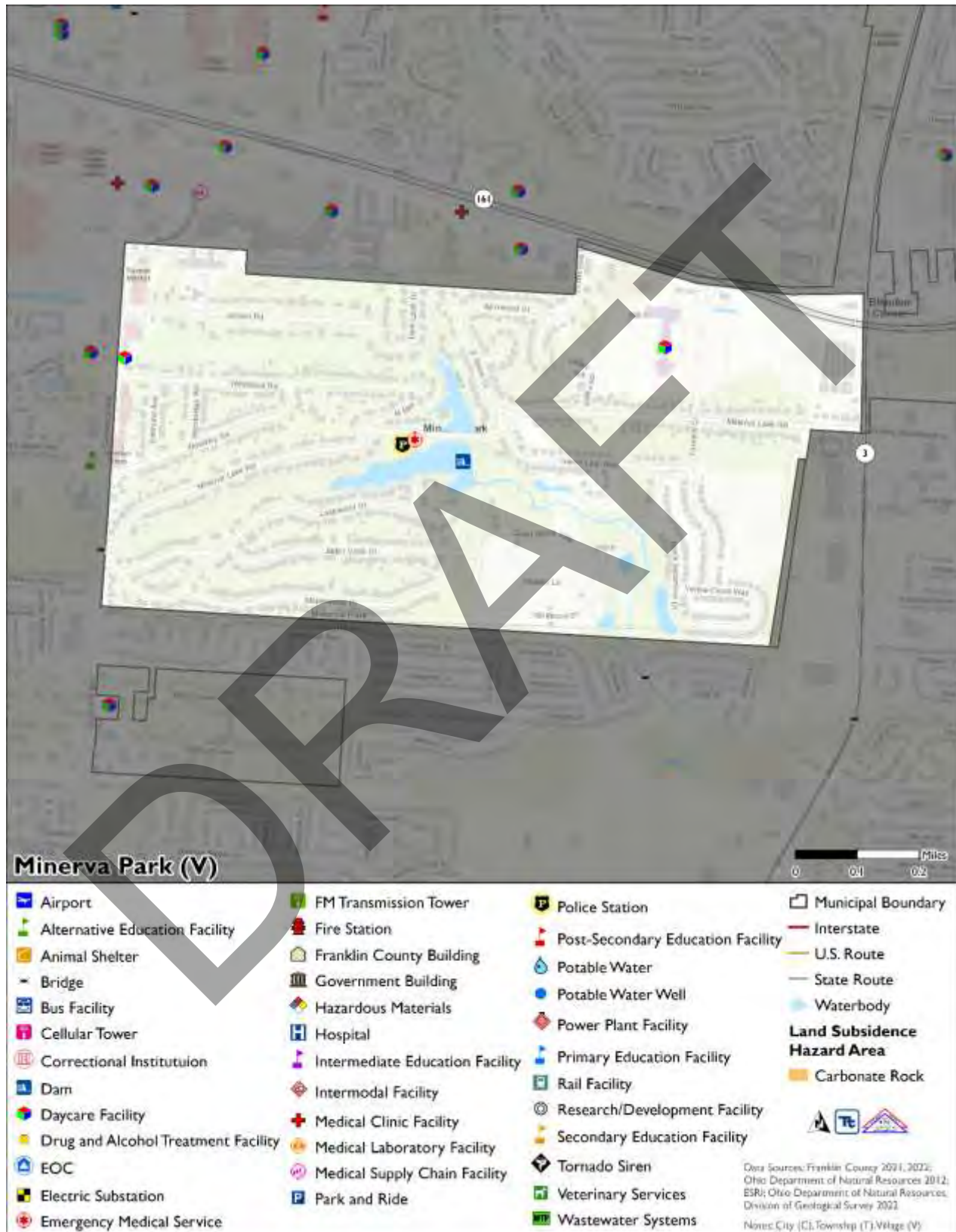


Figure 9.24-3. Village of Minerva Park Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Minerva Park history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Minerva Park experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.24-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Although the County was impacted, the Village did not report significant damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Although the County was impacted, the Village did not report significant damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village was subject to closures and masking/social distancing requirements.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Minerva

Park. The Village of Minerva Park reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.24-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.24-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Minerva Park

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Village of Minerva Park identified the following vulnerabilities within its community:

- Over the past 5+ years, administration, council, and residents have been discussing the need for an updated Community/Administration/Police Facility to provide proper services, including emergency response.
- The Village is experiencing storm flow that is no longer contained to the current closed (piped) storm sewer system and is flooding numerous locations within the Village.
- The Village lacks procedures to make Substantial Damage determinations following a disaster event.
- The Village does not currently have a Post Disaster Recovery Plan that integrates and addresses the current hazard of concern.

9.24.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessments earlier in this annex.

DRAFT

Table 9.24-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (1,000 / 3 months)	Mayor's Office	No Progress	No	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Minerva Park identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Minerva Park participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.24-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	-	X	X	-	-	-	X
Disease Outbreak	X	X	-	-	X	X	-	-	-	X
Drought	X	X	-	-	X	X	-	-	-	X
Earthquake	X	X	-	-	X	X	-	-	-	X
Extreme Temp	X	X	-	-	X	X	-	-	-	X
Flood	X	X	-	-	X	X	-	-	X	X
Geologic	X	X	-	-	X	X	-	-	-	X
Invasive Species	X	X	-	-	X	X	-	-	-	X
Severe Summer Weather	X	X	-	-	X	X	-	-	X	X
Severe Winter Weather	X	X	-	-	X	X	-	-	X	X
Tornado	X	X	-	-	X	X	-	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.24-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Minerva Park will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.24-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Village of Minerva Park-001	Community Center	Problem: Over the past 5+ years, administration, council, and residents have been discussing the need for an updated Community/Administration/Police Facility to provide proper services, including emergency response. Solution: Remodel of Community Building to be completed in 2023	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	6	1 year	Administration	Village budget	New Community Building established with updated	\$3.1 million	High	SIP	PP, ES
2023-Village of Minerva Park-002	2023 Storm Sewer Improvement Project	Problem: The Village is experiencing storm flow that is no longer contained to the current closed (piped) storm sewer system and is flooding numerous locations within the Village. Solution: The Village will conduct a study to determine if a new closed	Flood, Severe Summer Weather, Severe Winter Weather	6	5 Years	Public Works	FEMA, BRIC, HMGP, FMA	The Village will experience less flooding due to failing storm sewer system.	\$550,000	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		pipe system or a new combination closed and open channel system are more cost effective and will be more effective at containing storm/sewer water.										
2023- Village of Minerva Park-003	Substantial Damage Procedures	<p>Problem: The Village lacks procedures to make Substantial Damage determinations following a disaster event.</p> <p>Solution: The Village will develop official procedures for Substantial Damage and Substantial Improvement determinations, including responsible parties.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	6	3 years	Administration	Village Budget	Increased capabilities for disaster response	\$1,000	High	LPR	PR, ES
2023- Village of Minerva Park-004	Post Disaster Recovery Plan	<p>Problem: The Village does not currently have a Post Disaster Recovery Plan that integrates and addresses the current hazard of concern.</p> <p>Solution: The Village will develop a comprehensive Post Disaster Recovery Plan that addresses the hazards of concern to help residents after a disaster strikes.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species,	1	1 Year	Administration	Village Budget	Increased capabilities and direction for post disaster response	\$1,000	High	LPR	ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Severe Summer Weather, Severe Winter Weather, Tornado									

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.24-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Village of Minerva Park-001	Community Center	1	0	1	1	1	1	0	0	1	1	1	1	1	1	12	High
2023-Village of Minerva Park-002	2023 Storm Sewer Improvement Project	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-Village of Minerva Park-003	Substantial Damage Procedures	0	1	1	1	1	1	1	1	1	1	1	1	1	0	12	High
2023-Village of Minerva Park-004	Post Disaster Recovery Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.25 CITY OF NEW ALBANY

This section presents the jurisdictional annex for the City of New Albany that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City participated in the planning process, an assessment of the City's risk and vulnerability, the different capabilities used in the City, and an action plan that will be implemented to achieve a more resilient community.

9.25.1 Hazard Mitigation Planning Team

The City of New Albany identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City departments, including the Planner and Engineering Manager. The Planner represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.25-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Anna van der Zwaag, Planner II	Name/Title:	Joseph Stefanov, City Manager
Address:	99 W Main Street, PO Box 188 New Albany, Ohio 43054	Address:	99 W Main Street, PO Box 188 New Albany, Ohio 43054
Phone Number:	614-245-8707	Phone Number:	614-855-3913
Email:	avanderzwaag@newalbanyohio.org	Email:	jstefanov@newalbanyohio.org
NFIP Floodplain Administrator			
Name/Title:	Sierra Cratic-Smith, Planner		
Address:	99 W Main Street, PO Box 188 New Albany, Ohio 43054		
Phone Number:	614-939-2254		
Email:	scratics@newalbanyohio.org		
Additional Contributors:			
Name/Title:		Cara Denny, Engineering Manager	
Method of Participation:		Provided information NFIP administration	

9.25.2 Municipal Profile

The City of New Albany is in the northeast corner of Franklin County, bordered by the City of Westerville and Blendon Township to the west and the City of Gahanna to the south. Located roughly 18 miles northeast of Columbus, New Albany is situated in the headwaters of the Rocky Fork, a tributary of Big Walnut Creek. Rose Run and Sugar Run, tributaries of the Rocky Fork, flow northeast to southwest throughout the City. Blacklick Creek runs through the eastern end of the city.

According to the American Community Survey, the 2021 population for the City of New Albany was 10,962, a 41.92 percent increase from the 2010 Census Population of 7,724. Data from the 2021 American Community Survey indicates that 6.2 percent of the population is 5 years of age or younger and 7.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.25.3 Jurisdictional Capability Assessment and Integration

The City of New Albany performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of New Albany to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of New Albany and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.25-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	C.O. Part 13	Local; adopted Ohio Building Code in C.O. 1321	Community Development Department
<p><i>How does this reduce risk?</i></p> <p>The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy.</p>				
Zoning/Land Use Code	Yes	C.O. Part 11	Local	Community Development Department
<p><i>How does this reduce risk?</i></p> <p>This Zoning Ordinance is adopted to promote and protect the public health, safety, comfort, prosperity and general welfare by regulating and limiting the use of land areas and building and the erection, restoration and alteration of buildings and the use thereof for residential, business and industrial purposes; to regulate the area dimensions of land, yards and open spaces so as to secure adequate light, air and safety from fire and other dangers; to lessen or avoid congestion in the public streets; to regulate and restrict the bulk, height, design, percent of lot occupancy and the location of buildings; to protect the character of the existing agricultural, residential, business, industrial, and institutional areas and to assure their orderly and beneficial development; to provide for the orderly growth and development of lands, and for the purpose of dividing the Municipality into various districts.</p> <p>The zoning ordinance does discourage development or redevelopment within natural areas, including wetlands, floodways, and floodplains. C.O. 1155 includes provisions for flood damage reduction.</p>				
Subdivision Ordinance	Yes	C.O. 1187	Local	Community Development Department
<p><i>How does this reduce risk?</i></p> <p>The subdivision ordinance provides standards for development such as drainage & stormwater management requirements.</p>				
Site Plan Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Stormwater Management Ordinance	Yes	C.O. 1181	Local	Community Development Department
<p><i>How does this reduce risk?</i></p> <p>The stormwater runoff control measures require that land uses and developments which increase the runoff rate and/or volume shall control the discharge rate of runoff prior to its release to off-site land. The purposes of these measures are to:</p> <ol style="list-style-type: none"> (1) Permit development without increasing the flooding potential of other lands; (2) Reduce damage to receiving streams and impairment of their capacity, which may be caused by increases in the quantity and rate of stormwater discharge; and (3) Establish a basis for design of stormwater drainage systems on lands below undeveloped areas which shall preserve the rights and options of both dominant and servient property owners and assure long-term adequacy of storm drainage systems. 				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Real Estate Disclosure	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Growth Management	No	-	-	-
<p><i>How does this reduce risk?</i></p>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	C.O. 1155 – Flood Damage Reduction; adopted December 6, 2016	Local	Community Development Department
<i>How does this reduce risk?</i>				
<ul style="list-style-type: none"> A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities; B. Requiring that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction; C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; D. Controlling filling, grading, dredging, excavating, and other development which may increase flood damage; and, E. Preventing or regulating the construction of flood barriers, which will unnaturally divert flood, waters or which may increase flood hazards in other areas. 				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
<i>How does this reduce risk?</i>				
Planning Documents				
Comprehensive/Master Plan	Yes	Village Center Plan Engage New Albany Strategic Plan Rocky Fork Blacklick Accord Master Plan	Local	Community Development Department
<i>How does this reduce risk?</i>				
Includes provisions for managing stormwater, growth, development, and the environment.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Stormwater Pollution Prevention Plan	Local	Public Service Department
<i>How does this reduce risk?</i>				
Protects property and infrastructure by the safe conveyance of excessive runoff from extreme events.				
Open Space Plan	No	-	-	-



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	Yes	Economic Development Strategic Plan	Local	Community Development Department / Economic Development Manager
<i>How does this reduce risk?</i> Prepares for safe growth and development related to economic development.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	Yes	Leisure Trail Master Plan Transportation included as chapter of strategic plan	Local	Community Development Department
<i>How does this reduce risk?</i> Encourages transportation networks adapted to appropriate scales; determines sufficient capacity, load restrictions, slow zones, etc.				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No			
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Emergency Operations Plan (2014)	Local	City Manager
<i>How does this reduce risk?</i> The Emergency Operations Plan establishes emergency procedures, including those that require enactment during and after a hazard event.				
Continuity of Operations Plan	Yes	Included in EOP	Local	City Manager

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i> Establishes procedures to maintain critical services during and after a disaster event.				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of New Albany to oversee and track development.

Table 9.25-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Community Development Department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	There is a list in the strategic plan; however, it is not kept up to date between plan updates.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of New Albany and their current responsibilities that contribute to hazard mitigation.

Table 9.25-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Planning Commission

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Zoning Board of Adjustment	Yes	Board of Zoning Appeals
Planning Department	Yes	Community Development Department
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Sustainability Advisory Board
Open Space Board/Committee	Yes	Parks & Trails Advisory Board
Economic Development Commission/Committee	Yes	Community Improvement Corporation
Public Works/Highway Department	Yes	Public Service Department
Construction/Building/Code Enforcement Department	Yes	Community Development Department
Emergency Management/Public Safety Department	Yes	Integrated into Police and Public Service departments
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Acquiring two more in 2023 for Licking County portion of New Albany.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	City Forester tree trimming maintenance; monitoring of stormwater complaints
Mutual aid agreements	Yes	Available for city use as needed. City Attorney available.
Human Resources Manual	Yes	In place.
Other	Yes	Public Service and the City Forester manage an invasive species removal program.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Both planners & engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Both engineers and building inspectors/Chief Building Inspectors
Planners or engineers with an understanding of natural hazards	Yes	Planner with hazard mitigation experience. Planners and engineers on staff with education in mitigation/adaptation.
Staff with expertise or training in benefit/cost analysis	Yes	Planners, engineers, and other staff.
Professionals trained in conducting damage assessments	Yes	Chief building inspectors, building inspectors, engineers, and public service staff.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	GIS/Systems Analyst
Environmental scientist familiar with natural hazards	Yes	Available via consultants/as needed
Surveyor(s)	Yes	Available via consultants/as needed
Emergency Manager	Yes	County EMA Director available; not on New Albany staff
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of New Albany.

Table 9.25-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, the City has the ability
Incur debt through special tax bonds	Yes, the City has the ability
Incur debt through private activity bonds	Yes, it is assumed the City has the ability

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Withhold public expenditures in hazard-prone areas	Yes, the City has the ability
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of New Albany.

Table 9.25-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Chief Communications & Marketing Officer and two additional communications staff.
Personnel skilled or trained in website development	Yes	Chief Communications & Marketing Officer and two additional communications staff.
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Postings for flood mitigation, tornado season, etc.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Review development in floodplain
Warning systems for hazard events	Yes	Acquiring 2 more in 2023 for Licking County portion of New Albany
Natural disaster/safety programs in place for schools	Yes	Training and drills performed at schools.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Social media, weekly Connects emails to residents

Community Classifications

The table below summarizes classifications for community programs available to the City of New Albany.

Table 9.25-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Unknown	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Unknown	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	Yes	Tree City USA community	2010

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each

jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.25-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.25.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of New Albany.

Table 9.25-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
New Albany (C)	6	0	\$0.00	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of New Albany.

Table 9.25-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	The City continues to limit development in the floodplain and control filling/grading to prevent additional flooding.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	The City works with property owners directly if they are interested in mitigation (i.e. a list is not required, since the City works with owners immediately as needed).
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	<p>C.O. 1155.03</p> <p>(I) Substantial Damage Determinations. Damages to structures may result from a variety of causes including flood, tornado, wind, heavy snow, fire, etc. After such a damage event, the Floodplain Administrator shall:</p> <ol style="list-style-type: none"> Determine whether damaged structures are located in special flood hazard areas; Conduct substantial damage determinations for damaged structures located in special flood hazard areas; and Make reasonable attempt to notify owners of substantially damaged structures of the need to obtain a floodplain development permit prior to repair, rehabilitation, or reconstruction. <p>Additionally, the Floodplain Administrator may implement other measures to assist with the substantial damage determination and subsequent repair process. These measures include issuing press releases, public service announcements, and other public information materials related to the floodplain development permits and repair of damaged structures; coordinating with other federal, state, and local agencies to assist with substantial damage determinations; providing owners of damaged structures materials and other information related to the proper repair of damaged structures in special flood hazard areas; and assist owners of substantially damaged structures with increased cost of compliance insurance claims.</p> <p>No substantial damage determinations over the last five years to the City's knowledge.</p>
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None over the last five years to the City's knowledge.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Community Development Department
Are any certified floodplain managers on staff in your jurisdiction?	No

NFIP Topic	Comments
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	Potentially this could be a good idea. There are resources like the Ohio Floodplain Management Association that has some online resources that the City could utilize.
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	<p>C.O. 1155.03 - Administration</p> <ol style="list-style-type: none"> (1) Evaluate applications for permits to develop in special flood hazard areas. (2) Interpret floodplain boundaries and provide flood hazard and flood protection elevation information. (3) Review zoning/development permits to ensure that no new residential, industrial and/or commercial development occurs in special flood hazard areas. (4) Inspect buildings and lands to determine whether any violations of these regulations have been committed. (5) Make and permanently keep all records for public inspection necessary for the administration of these regulations including Flood Insurance Rate Maps, Letters of Map Amendment and Revision, records of issuance and denial of permits to develop in special flood hazard areas, determinations of whether development is in or out of special flood hazard areas for the purpose of issuing floodplain development permits, elevation certificates, variances, and records of enforcement actions taken for violations of these regulations. (6) Enforce the provisions of these regulations. (7) Provide information, testimony, or other evidence as needed during variance hearings. (8) Coordinate map maintenance activities and FEMA follow-up. (9) Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas identified by FEMA, must meet the development standards of these regulations.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	<p>An application for a floodplain development permit shall be required for all development activities as defined in Section 1155.03(c) located wholly within, partially within, or in contact with an identified special flood hazard area.</p> <p>A substantial improvement would include one that Change the footprint/character of structure.</p>
What are the barriers to running an effective NFIP program in the community, if any?	Education regarding code and regulations.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? 	C.O. 1155 – Flood Damage Reduction; adopted December 6, 2016

NFIP Topic	Comments
<ul style="list-style-type: none"> What is the date that your flood damage prevention ordinance was last amended? 	
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	<p>The City meets & exceeds the minimum requirements. The City prohibits the following uses outright from the special flood hazard area:</p> <p>A. Private water supply systems in all special flood hazard areas identified by FEMA, permitted under ORC Ch. 3701.</p> <p>B. Infectious waste treatment facilities in all special flood hazard areas, permitted under ORC Ch. 3734.</p> <p>C. New residential, industrial and/or commercial development.</p> <p>Chapter 1155 of Codified Ordinances provide detailed standards for development that comes in contact with the SFHA.</p>
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	<p>Threat to life & property are considered with every development proposal that goes before the Planning Commission, Board of Zoning Appeals, Architecture Review Board, or City Council.</p> <p>CO 1171 includes regulations for the preservation of natural features, including preservation of riparian corridors.</p>
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.25.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.25-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	40	-	45	-	54	-	103	-	54	-
Multi-Family	8	-	11	-	9	-	14	-	14	-
Other (commercial, mixed-use, etc.)	697	-	845	-	783	-	976	-	971	-
Total Permits Issued	40	-	45	-	54	-	103	-	54	-

Table 9.25-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					



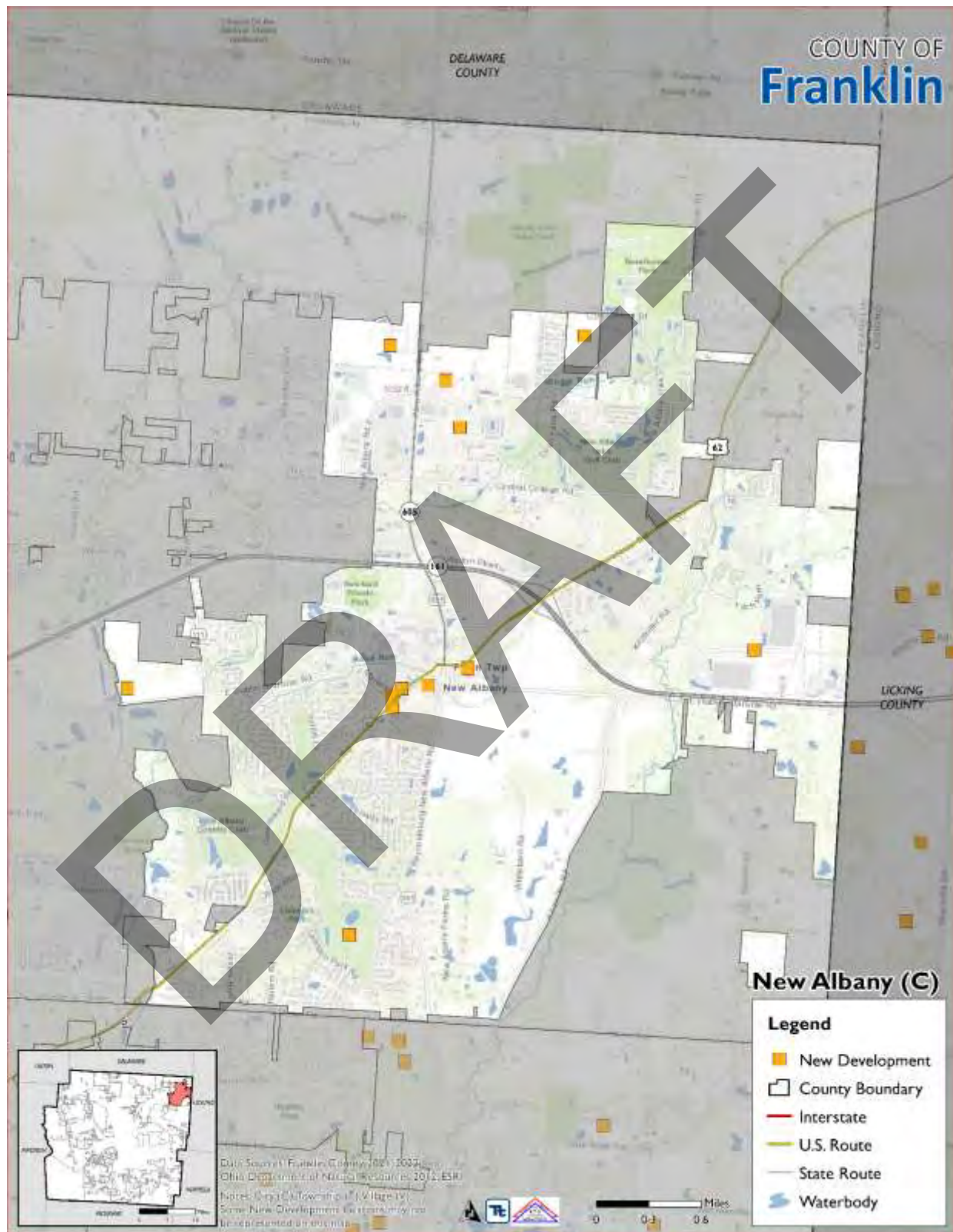
Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Town Center Apartments Buildings A	Residential	94,634 sq ft	200 W Main St	-	Complete
Town Center Apartments Building E	Residential	126,192 sq ft	195 W Main St	-	Complete
Nottingham Trace Subdivision	Residential	240 single family homes on 94.6+/- acres	Many	-	81 of 240 lots built as of 11/1/2022 (159 available lots remaining)
Courtyard at New Albany Subdivision	Residential	105 single family homes	Many	-	93 of 105 lots built as of 11/1/2022 (12 available lots remaining)
New Albany Country Club Section 28 (Ebrington)	Residential	66 single family homes	Many	-	32 homes built between Dec. 2018 and Oct. 2022 (16 available lots remaining)
New Albany Country Club Section 29 (Oxford)	Residential	30 single family homes	Many	-	11 homes built between Dec. 2018 and Oct. 2022 (6 available lots remaining)
Market & Main/Multi-tenant	Commercial	Occupancy for 10 companies	160 W Main St	-	Complete
Multi-tenant II/Beauty Park	Commercial	264,000 sq ft	8820 Smith's Mill	-	Complete
AEP Office Building II	Commercial	163,994 sq ft	8600 Smiths Mill	-	Complete
Axiom Building 2	Commercial	116,720 sq ft	8640 Innovation Campus Way	-	Complete
Axiom Building 3	Commercial	97,056 sq ft	9043 Smith's Mill Rd	-	Complete
Axiom Building 4	Commercial	314,131 sq ft	10015 Innovation Campus Way	-	Estimated completion Winter 2023
Vertex	Commercial	124,873 sq ft	13425 Worthington Rd	-	Estimated completion Winter 2023
VeePak Expansion	Commercial	174,360 sq ft	9040 Smith's Mill Rd	-	Complete
Northeast 302	Commercial	302,880 sq ft	9750 Innovation Campus Way	-	Complete
Alene Candles	Commercial	278,950 sq ft	9485 Innovation Campus Way	-	Complete
Google	Commercial	178,350 sq ft	1101 Beech Rd	-	Complete
Google Building II	Commercial	281,792 sq ft	1101 Beech Rd	-	Complete
Meta — NAO 1 & 2 Building 1	Commercial	973,670 sq ft	1500 Beech Rd	-	Complete
Meta — NAO3 Building 2	Commercial	518,184 sq ft	1500 Beech Rd	-	Complete
Meta – NAO 5 & 6 Building 3	Commercial	976,626 sq ft	1500 Beech Rd.	-	Estimated completion July 2023
VanTrust Site J Building I	Commercial	196,000 sq ft	8300 Innovation Campus Way West	-	Complete



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
VanTrust Site J Building II	Commercial	196,000 sq ft	8200 Innovation Campus Way West	-	Estimated completion Sept 2021
VanTrust, Cupertino Warehouse	Commercial	445,940 sq ft	13101 Worthington Rd	-	Estimated completion Winter 2022
American Regents Expansion	Commercial	178,302 sq ft	6610 New Albany Rd East	-	Estimated completion Aug 2021
Amazon	Commercial	1,005,649 sq ft	1245 Beech Rd.	-	Complete
Building 315	Commercial	317,086 sq ft	8950 Smith's Mill Rd. N.	-	Complete
Innovation Industrial	Commercial	130,096 sq ft	9360 Innovation Campus Way	-	Complete
Amgen, Inc.	Commercial	290,454 sq ft	4150 Ganton Parkway	-	Estimated completion Winter 2023
Lincoln Properties	Commercial	448,080 sq ft	3210 Horizon Court	-	Estimated completion Spring 2023
Lincoln Properties	Commercial	177,054 sq ft	3450 Horizon Court	-	Estimated completion Spring 2023
Speculative Warehouse	Commercial	523,761 sq ft	9850 Innovation Campus Way	-	Estimated completion Fall 2022
Speculative Warehouse	Commercial	351,851 sq ft	9885 Innovation Campus Way	-	Estimated completion Winter 2023
New Albany Commerce I	Commercial	542,737 sq ft	7915 Smith's Mill Rd.	-	Estimated completion Winter 2022
Innovation III	Commercial	302,630 sq ft	8255 Innovation Campus Way W	-	Estimated completion Winter 2022
Known or Anticipated Major Development in the Next Five (5) Years					
Intel – 2 fabs	Commercial	1,000+/- acres	TBD	-	Intel's two fabs estimated completion by 2025. Surrounding suppliers, tbd. https://newalbanyohio.org/answers/new-albany-silicon-heartland/
Intel Suppliers	Commercial	200+/- acres	TBD	-	TBD
Woodhaven Subdivision	Residential	60 single family homes on 35.7+/1 acres	Many – located at corner of 7555 Bevelhymer Rd and 7325 Walnut St	-	TBD

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.25-1. City of New Albany New Development Map



9.25.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of New Albany's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of New Albany has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.25-2. City of New Albany Hazard Area Extent and Location Map-Flood

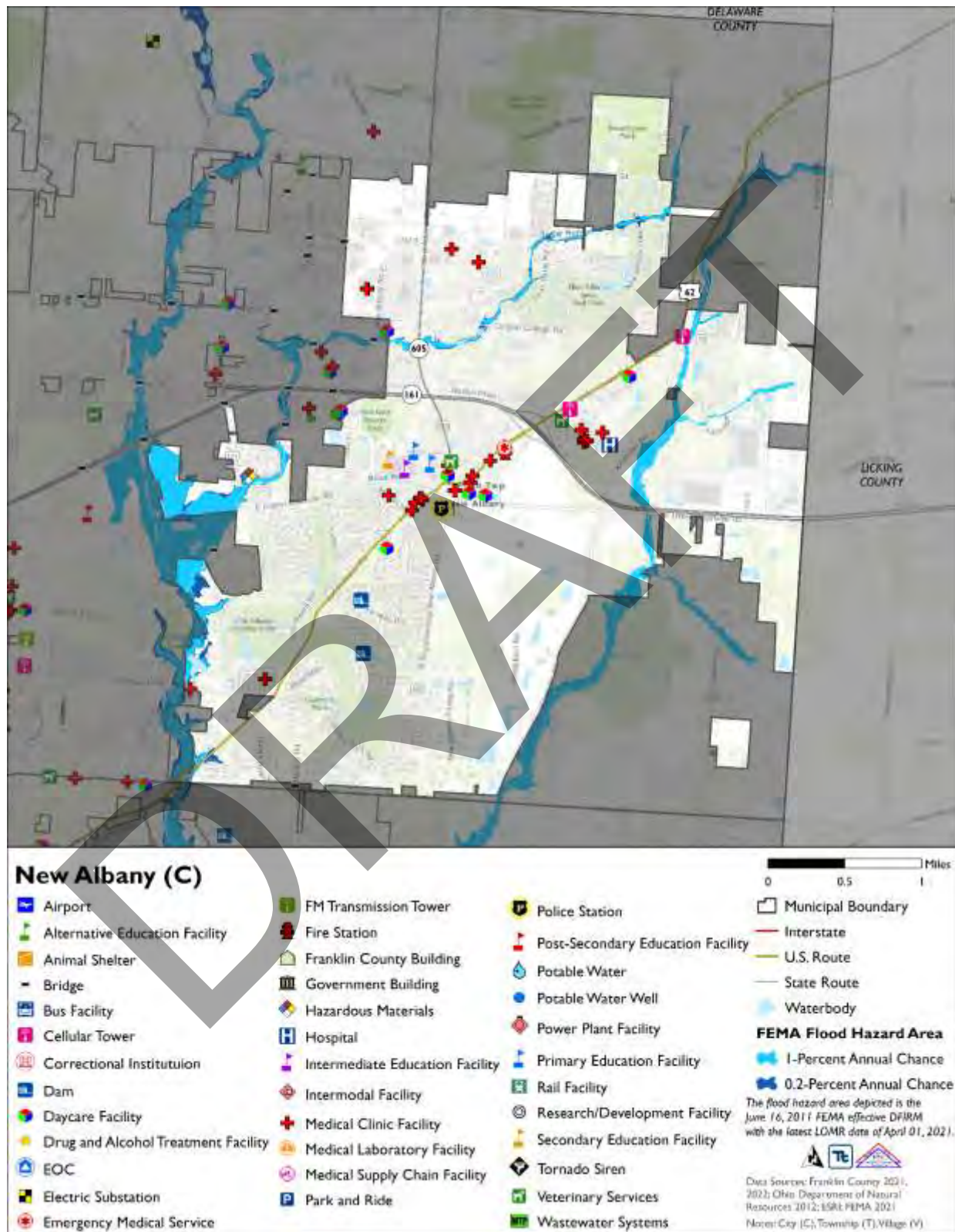


Figure 9.25-3. City of New Albany Hazard Area Extent and Location Map-Inland Erosion

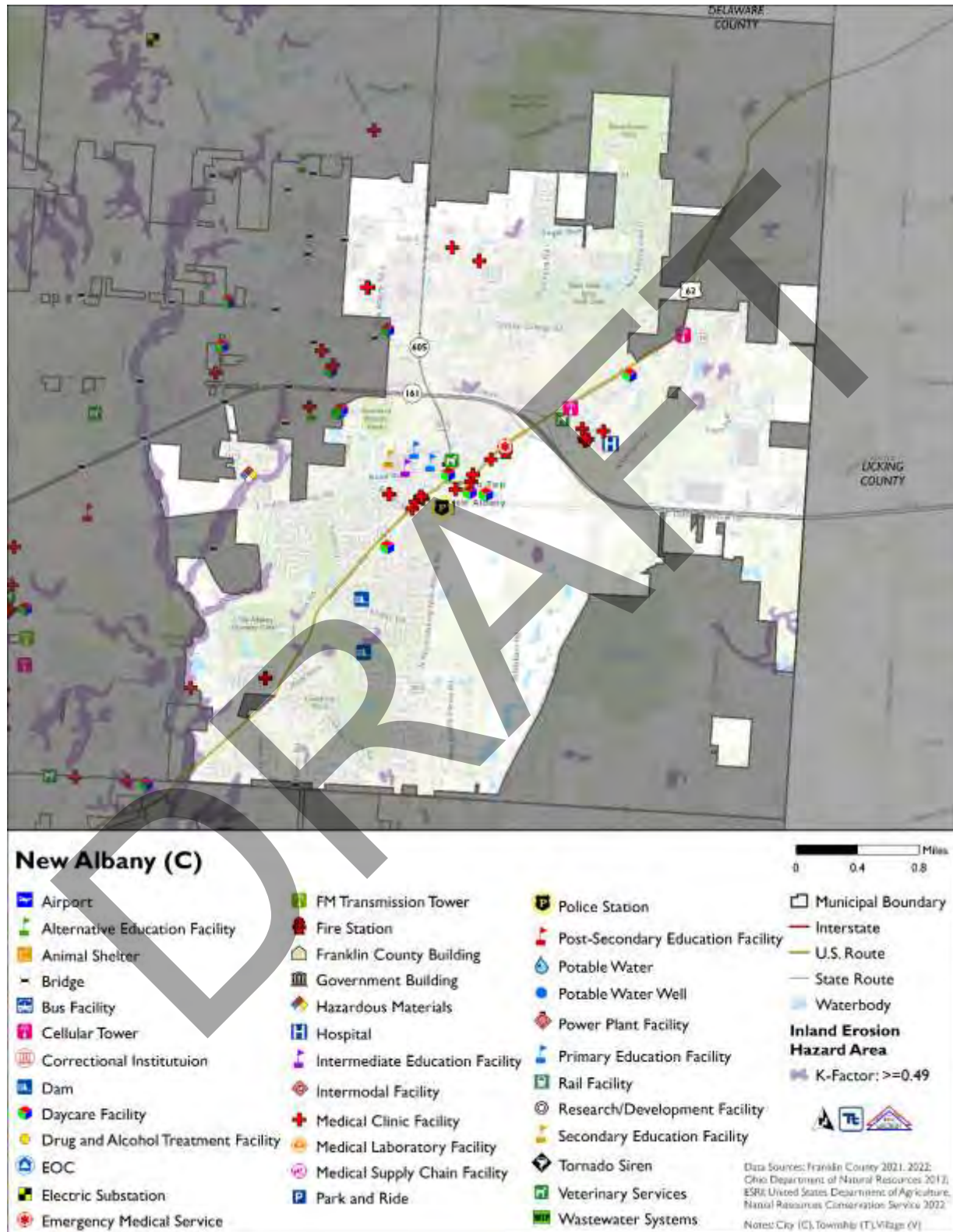
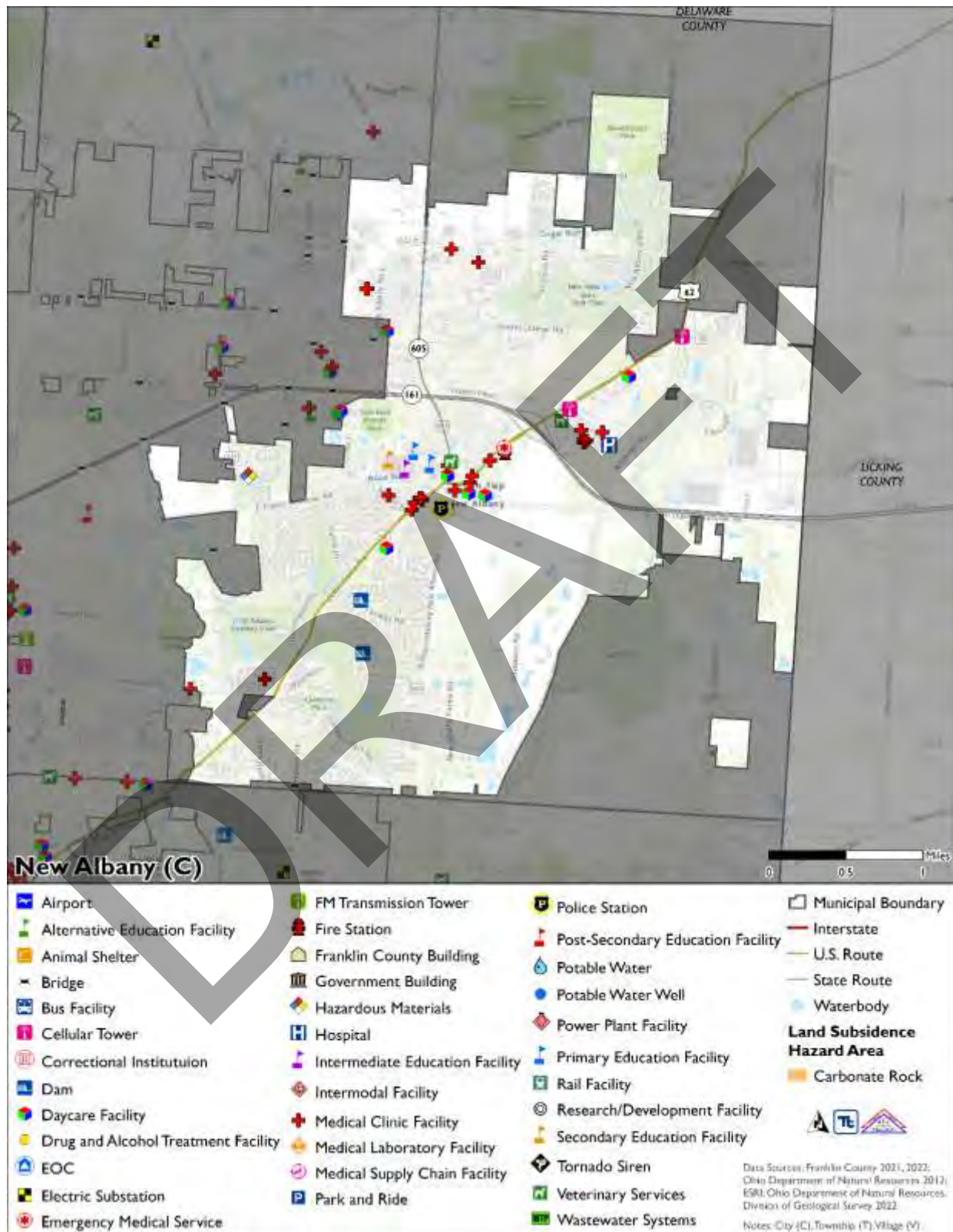


Figure 9.25-4. City of New Albany Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of New Albany's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of New Albany experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.25-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	Although the County was impacted, the City did not report significant damages.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Although the County was impacted, the City did not report significant damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Although the County was impacted, the City did not report significant damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City continues to update the website as relevant information is disseminated. Ongoing analysis on economic impacts of covid, including the potential loss of income tax associated with 20,000+ business park employees working remotely in other jurisdictions. https://newalbanyohio.org/answers/covid-19/

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each

hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of New Albany. The City of New Albany reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.25-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.25-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of New Albany

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	2	2
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of New Albany identified the following vulnerabilities within its community:

- The Engage New Albany Strategic Plan recommended the city provide safe and efficient collection of stormwater and continue to maintain and improve water quality of New Albany's tributaries.
- The Engage New Albany Strategic Plan identified the Market Street Extension project as an opportunity to create a public green space featuring regional stormwater retention ponds.
- The City is in process of developing Taylor Farm Park, an approximately 100-acre property that was farmed until recently and will be converted to a community park with ~3 miles of leisure trail, playground, community gardens, native landscaping, and other community amenities. Located along Rocky Fork.
- There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.
- The City does not have adequate emergency sirens to provide adequate public emergency alerts (Tornado, Flooding, etc.) to all areas within New Albany.
- To eradicate the infestation of the EAB in New Albany the City has developed a management plan for the removal and disposal of Ash trees on City property and within the right-of-way and replace them with a better tree variety that is disease and insect resistant. The City has replaced all impacted Ash street trees.
- The City experiences drainage problems that contribute to flooding due to regional growth. *
- There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.
- The City Administration and the public are unaware of codes and regulations that have been updated and designed to protect from the hazards of concern. *
- The City of New Albany contains two private dams. With any dam, failure can place additional storage requirements downstream.
- The City has experienced issues with disease outbreak, extreme temperatures, and droughts.
- The City is currently experiencing growth - both in residential and commercial areas. The need for regional stormwater solutions is important to allow for this growth while also mitigation potential for flooding from increased stormwater runoff associated with new development.
- Slope areas along stream corridors such as Rose Run and along Rocky Fork are especially susceptible to geologic hazards such as erosion. These areas are often overrun with invasive species that can also cause ecological, environmental, and potentially economic damage.
- The City updates its strategic plan every 5 years and currently does not address the current hazards of concern. This provides a good opportunity to integrate projects that can reduce risks to hazards.

*

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.25.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.25-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for repetitive loss structures within the Village of New Albany to permanently reduce damage to these structures. (1 structure at 250,000 / 1 year)	Mayor's Office	No Progress	No	-	-
Seek funding for the implementation of the Rose Run Greenway Corridor Study to control flooding of the Rose Run Stream and improve its water quality. (\$200,000 / 1 year)	Mayor's Office	In Progress	Yes	The Engage New Albany Strategic Plan recommended the city provide safe and efficient collection of stormwater and continue to maintain and improve water quality of New Albany's tributaries. The improvements along the Rose Run Stream corridor will consider stormwater in the design. Need implementation of Greenway Corridor Study at Rose Run 1, Rose Run 2, Regional stormwater basins, etc.	Mayor's Office
Develop and implement public education to increase public awareness and understanding of flooding hazards associated with ditches, streams, and waterways and their need for maintenance. (15,000 / 1 year)	Mayor's Office	In Progress	Yes	Can be broadened to include hazard events as a whole.	Communications Team
Seek funding to purchase 3 additional Outdoor Siren Warning Systems in New Albany. To provide adequate public emergency alerts (Tornado, Flooding, etc.)	Mayor's Office	In Progress	Yes	To provide adequate public emergency alerts (Tornado, Flooding, etc.) to all areas within New	Public Service

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
to all areas within New Albany it is necessary to install additional outdoor sirens in the south, west and north locations of the community. (3 units/ \$66,000)				Albany it is necessary to install additional outdoor sirens. Adding 2 sirens in 2023	
Seek funding for a two way radio system for utilization by the public service department. Communication with maintenance staff on the road and in the field is critical to City operations when responding to severe storm events such as snow/ice, rain and wind. (Implementation cost is \$85,000)	Mayor's Office	Complete. The service department has a dependable two way radio system in place.	No	-	-
To eradicate the infestation of the EAB in New Albany the City proposes to develop a management plan for the removal and disposal of Ash trees on City property and within the right-of-way and replace them with a better tree variety that is disease and insect resistant. (Estimated cost \$200,000)	Mayor's Office	In Progress. The City has replaced all impacted Ash street trees and continues treatment of remaining ash trees.	Yes	Infestation of the EAB	City Forester, Public Service Department
To alleviate the drainage problems the City proposes to install a public storm sewer system and direct the excess water flow to a nearby City owned wetland park. Additionally, the rear yards would be re-graded to achieve positive drainage to newly installed storm structures. (Estimated cost \$250,000)	Mayor's Office	In Progress	Yes	Needed to alleviate flooding risk	Mayor's Office
There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages. The City proposes	Mayor's Office	In Progress. Part A has not happened. Part B is in progress.	Yes	There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject	Mayor's Office

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
to separate this project into two parts. Part A would include the purchase of the private properties and removal of their structures threatened by flooding. Part B is the construction work to increase the streams capacity, stabilize the banks and restore vegetation within the stream corridor. (Part A \$4,250,000) (Part B \$350,000)				to damage when stream waters reach flooding stages. Part A has not happened. Part B is ongoing.	
There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages. The City proposes to separate this project into two parts. Part A would include the purchase of two (2) private properties and removal of one (1) structure threatened by flooding. Part B is the construction work to increase the head water capacity, stabilize the banks and restore vegetation within the stream corridor. (Part A \$200,000) (Part B \$250,000)	Mayor's Office	In Progress	Yes	There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages	Mayor's Office

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of New Albany identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of New Albany participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.25-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	X	X	X	-	-	X
Disease Outbreak	X	X	-	X	X	-	X	-	-	X
Drought	X	X	-	X	X	-	X	-	-	X
Earthquake	X	X	-	X	X	-	X	-	-	X
Extreme Temp	X	X	-	X	X	-	X	-	-	X
Flood	X	X	X	X	X	X	X	X	X	X
Geologic	X	X	X	X	X	-	X	X	-	X
Invasive Species	X	-	X	X	X	-	X	X	-	-
Severe Summer Weather	X	X	X	X	X	X	X	X	X	X
Severe Winter Weather	X	X	X	X	X	X	X	X	X	X
Tornado	X	X	-	X	X	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.25-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of New Albany will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.25-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of New Albany-001	Rose Run 2 Regional Stormwater Basins	<p>Problem: The Engage New Albany Strategic Plan recommended the city provide safe and efficient collection of stormwater and continue to maintain and improve water quality of New Albany's tributaries.</p> <p>Solution: The improvements along the Rose Run Stream corridor will consider stormwater in the design.</p>	New and Existing	Flood, Severe Summer Weather, Severe Winter Weather	6	Within 5 years	Public Service	BRIC, PDM, HMGP, City budget	Reduction in stormwater flooding, improved water quality	\$200,000	High	SIP	SP
2023-City of New Albany-002	Regional Stormwater Basins – Market Street Extension	<p>Problem: The Engage New Albany Strategic Plan identified the Market Street Extension project as an opportunity to create a public green space featuring regional stormwater retention ponds.</p> <p>Solution: The City will create a public green</p>	New and Existing	Flood, Severe Summer Weather, Severe Winter Weather	6	Within 5 years	Public Service	BRIC, PDM, HMGP, City budget	This will help alleviate current drainage issues while also preparing for additional stormwater retention needs from future	High	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		space at the Markey Street Extension featuring regional stormwater retention ponds.							development in the area.				
2023-City of New Albany-003	Taylor Farm	<p>Problem: The City is in process of developing Taylor Farm Park, an approximately 100-acre property that was farmed until recently and will be converted to a community park with ~3 miles of leisure trail, playground, community gardens, native landscaping, and other community amenities. Located along Rocky Fork.</p> <p>Solution: Project includes restoration of wetlands, invasive species removal, and native landscaping to minimize stormwater runoff.</p>		Flood, Severe Summer Weather, Severe Winter Weather, Invasive Species	3	Within 5 Years	Administration Services, Public Service	BRIC, HMGP, CDBG, City Budget	The City will have restored wetlands that help with stormwater management and enhance native species.	>\$500,000	High	NSP	NR
2023-City of New Albany-004	Rose Run Headwater Stream Corridor Buyouts	<p>Problem: There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.</p>	Existing	Flood, Severe Summer Weather, Severe Winter Weather	6	Within 5 Years	Mayor's Office	FMA, BRIC, HMGP, CDBG, City Budget	The properties would experience reduced flooding.	Part A \$200,000, Part B \$250,000	High	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City proposes to separate this project into two parts. Part A would include the purchase of two (2) private properties and removal of one (1) structure threatened by flooding. Part B is the construction work to increase the head water capacity, stabilize the banks and restore vegetation within the stream corridor.											
2023-City of New Albany-005	Emergency Sirens	Problem: The City does not have adequate emergency sirens to provide adequate public emergency alerts (Tornado, Flooding, etc.) to all areas within New Albany. Solution: The City will purchase and install two additional sirens in 2023.	Existing	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	5	1 year	Public Service	FMA, HMGP, BRIC, CDBG, NGWSGP	Improved emergency alert system	High	High	SIP	ES
2023-City of New Albany-006	Emerald Ash Borer Treatment	Problem: To eradicate the infestation of the EAB in New Albany the City has developed a management plan for the removal and	N/A	Invasive Species	3	Within 5 years	City Forester, Public Service Department	HMGP, City Budget	Protection of trees, reduction of dead and falling trees	\$100,000	High	NSP	NR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		disposal of Ash trees on City property and within the right-of-way and replace them with a better tree variety that is disease and insect resistant. The City has replaced all impacted Ash street trees. Solution: The City will continue treatment of remaining ash trees.											
2023-City of New Albany-007	Drainage Corrections*	Problem: The City experiences drainage problems that contribute to flooding due to regional growth. Solution: The City will conduct a study to determine the most cost-effective method to install a public storm sewer system that directs the excess water flow to a nearby City owned wetland park. The City will ensure the sewer system will allow for growth and has the capacity to handle runoff from new development. Additionally, the rear yards would be re-graded to achieve positive	Existing	Flood, Severe Summer Weather, Severe Winter Weather	6	Within 5 years	Mayor's Office	FMA, BRIC, HMGP, CDBG, City Budget	Reduction in flooding and drainage issues	\$250,000	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		drainage to newly installed storm structures.											
2023-City of New Albany-008	Rose Run Stream Corridor Buyouts	<p>Problem: There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.</p> <p>Solution: The City proposes to separate this project into two parts. Part A would include the purchase of the private properties and removal of their structures threatened by flooding. Part B is the construction work to increase the streams capacity, stabilize the banks and restore vegetation within the stream corridor. Part B is underway at this time.</p>	Existing	Flood, Severe Summer Weather, Severe Winter Weather	6	Within 5 years	Mayor's Office	BRIC, HMGP, FMA, PDM	Reduction in flood damage to homes, restoration of natural stream passage	Part A \$4,250,000, Part B \$350,000	High	SIP, NSP	PP, NR
2023-City of New Albany-009	Code and Regulation Education*	Problem: The City Administration and the public are unaware of codes and regulations that have been updated and designed to protect from the hazards of concern.	Existing	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic,	1	2 Years	Administration	City Budget	The City residents will be more knowledgeable of updated codes and regulations and the	\$5,000	High	LPR	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will continue to update codes and regulations and post updated information of the hazards of concern on their website so that everyone is aware of any new regulations or codes. Additionally, the City will post hazard information on social media platforms and will share information with residents who are signed up to these platforms.		Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado					hazards of concern.				
2023-City of New Albany-010	Limit use of fill within the Floodplain	Problem: The City of New Albany contains two private dams. With any dam, failure can place additional storage requirements downstream. Solution: The City will continue to preserve floodplain storage capacity by limiting the use of fill within the floodplain which will help to mitigate flooding associated with a potential dam failure.	Existing	Dam/Levee, Flood	3, 6	Ongoing	Administration	City Budget	Risk reduction associated with maintaining or increasing floodplain storage capacity. Avoid losses associated with flooding.	Staff time	High	LPR	PP
2023-City of New	Partnership Formation	Problem: The City has experienced issues with disease outbreak, extreme	Both	Disease Outbreak,	1	Ongoing	City Administration, City of	City Budget	The City will have stronger partnerships that will help	None	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
Albany-011		temperatures, and droughts. Solution: The City will continue to reach out and form partnerships with local health agencies, the City of Columbus and MORPC to monitor droughts, disease outbreak and effects of extreme temperatures.		Drought, Extreme Temp			Columbus, MORPC		residents with disease outbreak, drought and extreme temperature.				
2023-City of New Albany-012	Construct a Regional stormwater control facility	Problem: The City is currently experiencing growth - both in residential and commercial areas. The need for regional stormwater solutions is important to allow for this growth while also mitigation potential for flooding from increased stormwater runoff associated with new development. Solution: The City will create a regional stormwater compensation area near the soon to be developed Rose Run Park - Phase II, would enable this area and larger portions of Village Center to develop. In recent	New	Flood	6	Less than 5 Years	Public Works, Administration	FMA, HMGP, BRIC, CDBG	Benefits include reducing risk from flooding and increasing capacity for growth.	>\$1 Million	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		studies, an area just to the east of Village Hall has been identified as an ideal location for stormwater management.											
2023- City of New Albany- 013	Replace/Restore Native vegetation	<p>Problem: Slope areas along stream corridors such as Rose Run and along Rocky Fork are especially susceptible to geologic hazards such as erosion. These areas are often overrun with invasive species that can also cause ecological, environmental, and potentially economic damage.</p> <p>Solution: The City will continue to identify opportunities to replace invasive species, especially along stream corridors, with native or sustainable alternatives will enhance the city's natural spaces and prevent damage associated with invasives. Planting native vegetation along steep slope areas prevents erosion.</p>	Existing	Geologic, Invasive Species	3	Less than 5 Years	Administration	FMA, BRIC, HMGP, City Budget	Benefits include reducing potential for geologic issues and damaged stream health or infrastructure; reducing reliance on fertilizers and pesticides; reducing need for water; preventing erosion; reducing air pollution; provide shelter for food and wildlife (such as essential pollinators).	\$20,000	High	NSP	NR
2023- City of New	Integrate Hazard Mitigation into	Problem: The City updates its strategic plan every 5 years and currently does not address	Existing	Dam/Levee, Disease Outbreak, Drought,	1	Less than 5 Years	Administration, Mayors Office	City Budget	Benefits include enhanced public	Staff Time	High	LPR, EAP	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
Albany-014	Local Planning Efforts*	<p>the current hazards of concern. This provides a good opportunity to integrate projects that can reduce risks to hazards.</p> <p>Solution: The City will integrate hazard mitigation planning into its next strategic plan update.</p>		Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado					awareness, reduced risk of loss of life, reduced risk to infrastructure.				

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- **Property Protection (PP)**—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- **Public Information (PI)**—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- **Natural Resource Protection (NR)**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Structural Flood Control Projects (SP)**—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Emergency Services (ES)**—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.25-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of New Albany-001	Rose Run 2 Regional Stormwater Basins	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2023-City of New Albany-002	Regional Stormwater Basins – Market Street Extension	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2023-City of New Albany-003	Taylor Farm	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-City of New Albany-004	Rose Run Headwater Stream Corridor Buyouts	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2023-City of New Albany-005	Emergency Sirens	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2023-City of New Albany-006	Emerald Ash Borer Treatment	0	1	1	1	1	1	0	1	1	1	0	1	1	1	13	High
2023-City of New Albany-007	Drainage Corrections*	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of New Albany-008	Rose Run Stream Corridor Buyouts	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2023-City of New Albany-009	Code and Regulation Education*	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of New Albany-010	Limit use of fill within the Floodplain	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2023-City of New Albany-011	Partnership Formation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-City of New Albany-012	Construct a Regional stormwater control facility	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of New Albany-013	Replace/Restore Native vegetation	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-City of New Albany-014	Integrate Hazard Mitigation into Local Planning Efforts*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.26 TOWNSHIP OF NORWICH

This section presents the jurisdictional annex for the Township of Norwich that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Norwich participated in the planning process, an assessment of the Township of Norwich's risk and vulnerability, the different capabilities used in the Township of Norwich, and an action plan that will be implemented to achieve a more resilient community.

9.26.1 Hazard Mitigation Planning Team

The Township of Norwich identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.26-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Jamie Fisher / Township Administrator	Name/Title:	Robbie Thomas / Road Superintendent
Address:	5181 Northwest Parkway, Hilliard, Ohio 43026	Address:	3225 Dublin Rd, Hilliard, OH 43026
Phone Number:	(614) 876-3328	Phone Number:	(614) 876-2236
Email:	jamie_fisher@norwichtownship.org	Email:	robbie_thomas@norwichtownship.org
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors			
Name/Title:	No additional contributors		
Method of Participation:			

9.26.2 Municipal Profile

The Township of Norwich is in the northwest area of Franklin County and is bordered by Washington Township to the north, Perry Township to the east, Brown Township to the west and Prairie and Franklin Townships to the South. The Township is composed of several small “islands” which are separated due to annexations, most of the annexations being by the City of Columbus.

According to the American Community Survey, the 2021 population for the Township of Norwich was 37,356, a 17.45 percent increase from the 2010 Census population of 31,807. Data from the 2021 American Community Survey indicates that 6 percent of the population is 5 years of age or younger and 11.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.26.3 Jurisdictional Capability Assessment and Integration

The Township of Norwich performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Norwich to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

It should be noted that the City of Hilliard and Franklin County provides a majority of services to the Township of Norwich. For details on the City’s capabilities, refer to Section 9.15, and for the County’s capabilities refer to Section 9.1 and Section 5 (Capability Assessment). The following section provides capabilities within the Township of Norwich.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Norwich and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.26-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution – October 11, 2022	Franklin County	Franklin County Zoning Officer
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Structures are not permitted to be built in the floodplain.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations – March 27, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Franklin County Stormwater Drainage Manual – March 13, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Franklin County's Flood Damage Reduction Regulation – September 19, 2007	Franklin County	Franklin County Floodplain Administrator
<i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	Franklin County	Stormwater Executive Committee
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Norwich to oversee and track development.

Table 9.26-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Residential permits are issued by the Franklin County Economic Development & Planning Department; commercial permits are issued by the State of Ohio. Zoning complaints are dealt with through the Franklin County Zoning Division.
If you do not issue development permits, what is your process for tracking new development?	N/A	Coordinate with the Franklin County Building Department.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The Township of Norwich does not track permits; it coordinates with the Franklin County Building Department to maintain its list.
Do you have a buildable land inventory? • If yes, please describe	No	The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Norwich and their current responsibilities that contribute to hazard mitigation.

Table 9.26-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Norwich Township Road Department is responsible for maintaining 13.7 miles of roadways within the unincorporated areas of Norwich Township. Maintaining roadways involves snow removal, roadway and drainage repairs, street sweeping, road sign management, and services maintained within the public right of ways, such as removal of dead animals, tree removal, and sidewalk repairs.</p> <p>The Norwich Township Road Department consists of a Road Superintendent and 3 full-time Road Laborers.</p>
Construction/Building/Code Enforcement Department	No	Zoning complaints are dealt with through the Franklin County Zoning Division.
Emergency Management/Public Safety Department	Yes	The Norwich Township Fire Department provides fire prevention, suppression, Emergency Medical Services, and fire

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		safety/prevention education programs for the residents of Norwich Township. The Norwich Township Fire Department consists of 91 full-time firefighters at three stations, which includes an administrative staff of five who manage Prevention Programs and Services, Training, and Emergency Medical Services. The department's three stations are strategically located within the Township to facilitate quick response time on emergency calls to any part of the Township.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Franklin County's warning system
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Norwich Township Road Department is responsible for snow removal, roadway and drainage repairs, street sweeping, road sign management, and services maintained within the public right of ways, such as removal of dead animals, tree removal, and sidewalk repairs.
Mutual aid agreements	No	-
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	-	-
Engineers or professionals trained in building or infrastructure construction practices	-	-
Planners or engineers with an understanding of natural hazards	-	-
Staff with expertise or training in benefit/cost analysis	-	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)		Consider the following: Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Township of Norwich.

Table 9.26-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas, or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Norwich.

Table 9.26-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook Twitter, Instagram, and YouTube
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Franklin County's Warning System
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	The Township utilizes their social media accounts to perform public outreach for the described purposes. There are also programs through Focus Hilliard which concentrate on Fire Safety Education.

Community Classifications

The table below summarizes classifications for community programs available to the Township of Norwich.

Table 9.26-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.26-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.26.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Norwich.

Table 9.26-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Norwich (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Norwich.

Table 9.26-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	No
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	Unknown
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	Yes
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure

NFIP Topic	Comments
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.26.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.26-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.26-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.26.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Norwich's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Norwich has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.26-1. Township of Norwich Hazard Area Extent and Location Map - Flood

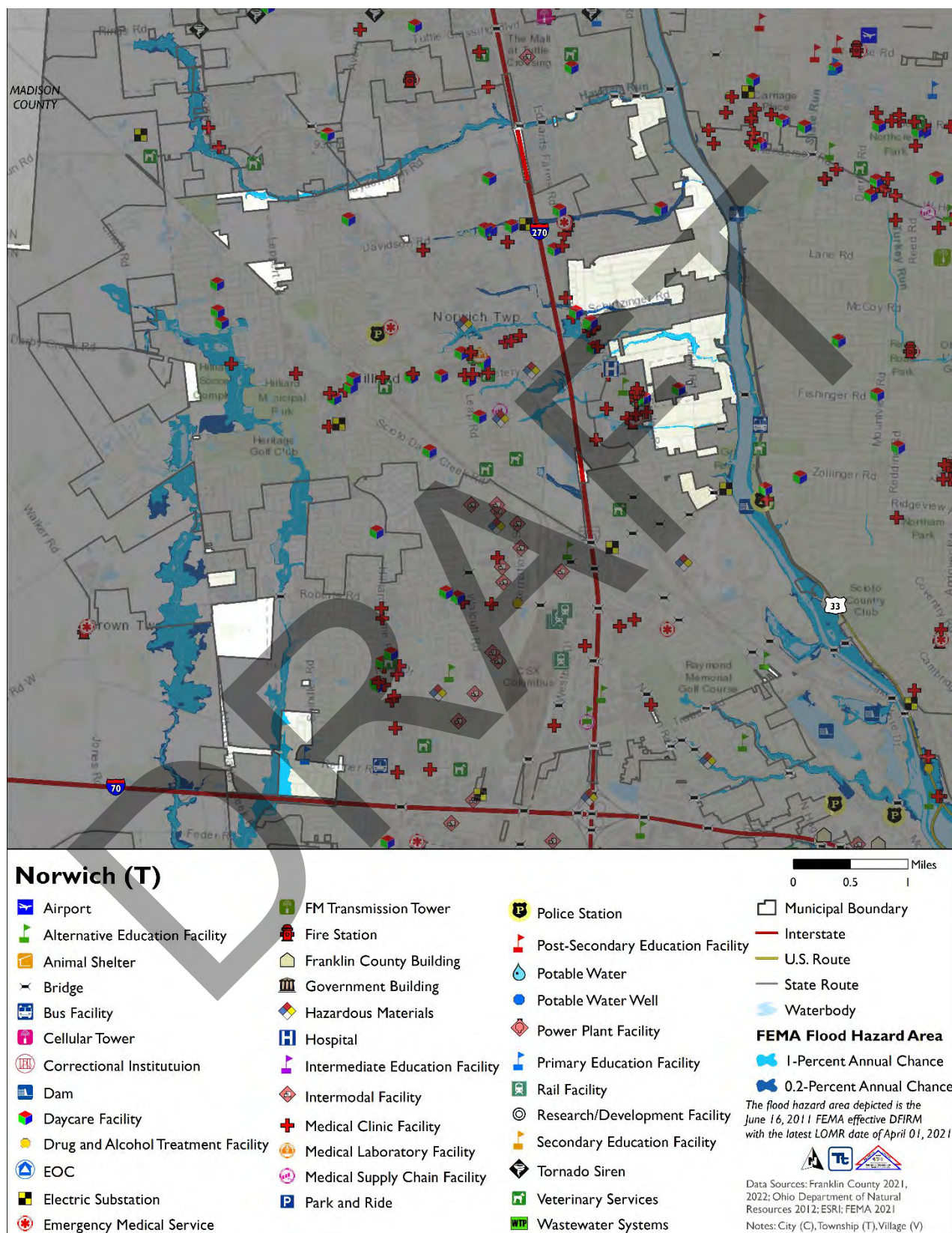


Figure 9.26-2. Township of Norwich Hazard Area Extent and Location Map – Land Subsidence

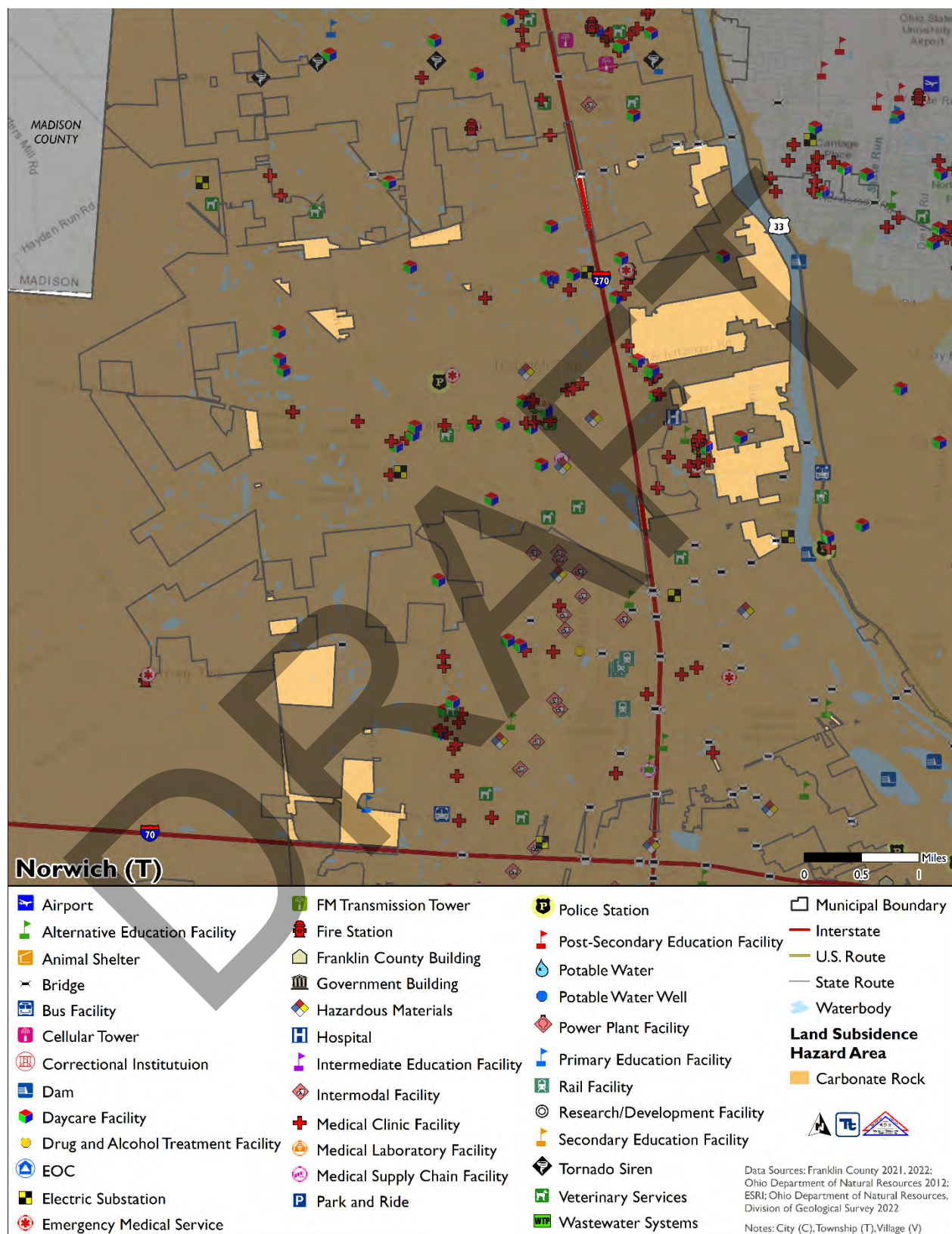


Figure 9.26-3. Township of Norwich Hazard Area Extent and Location Map – Inland Erosion

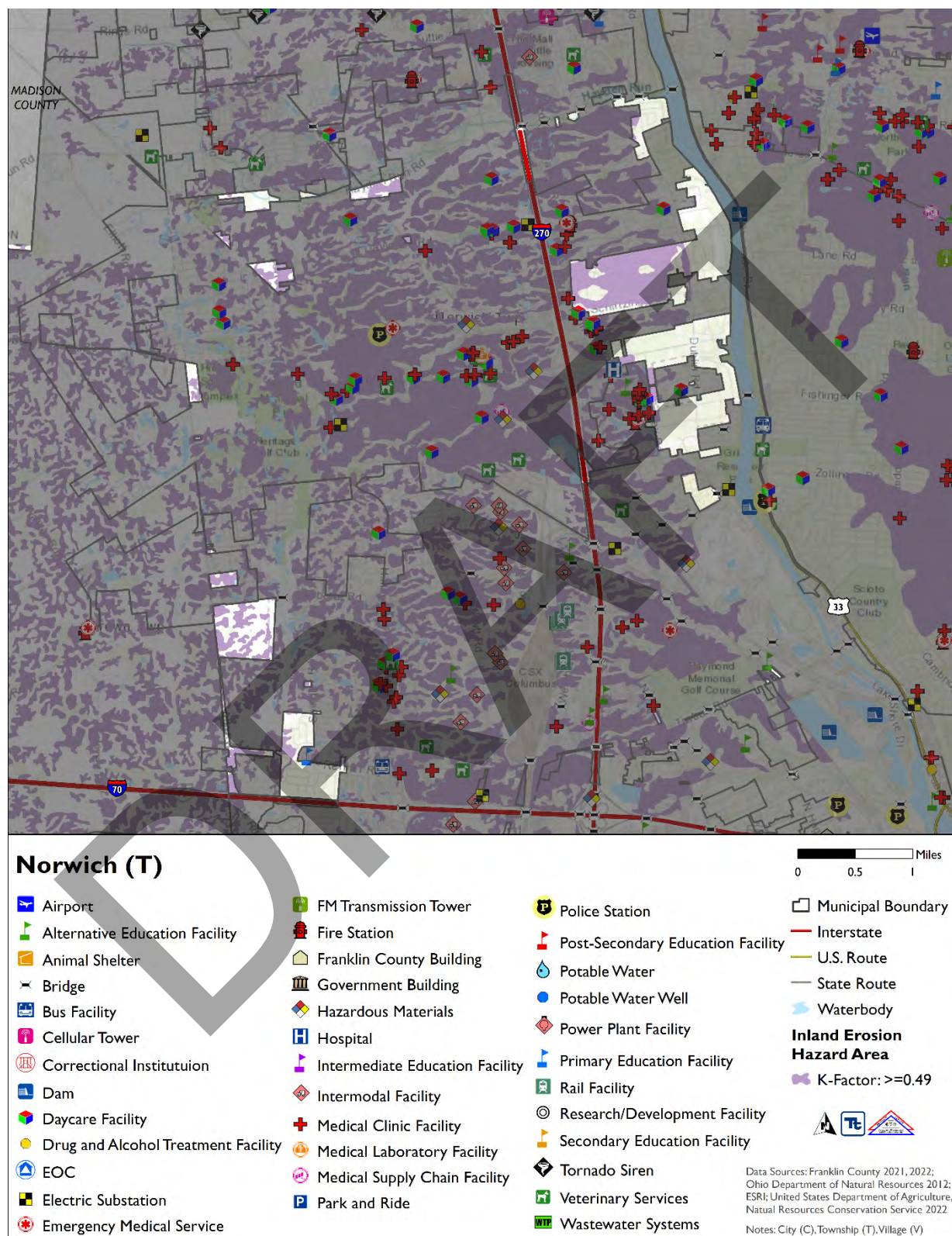
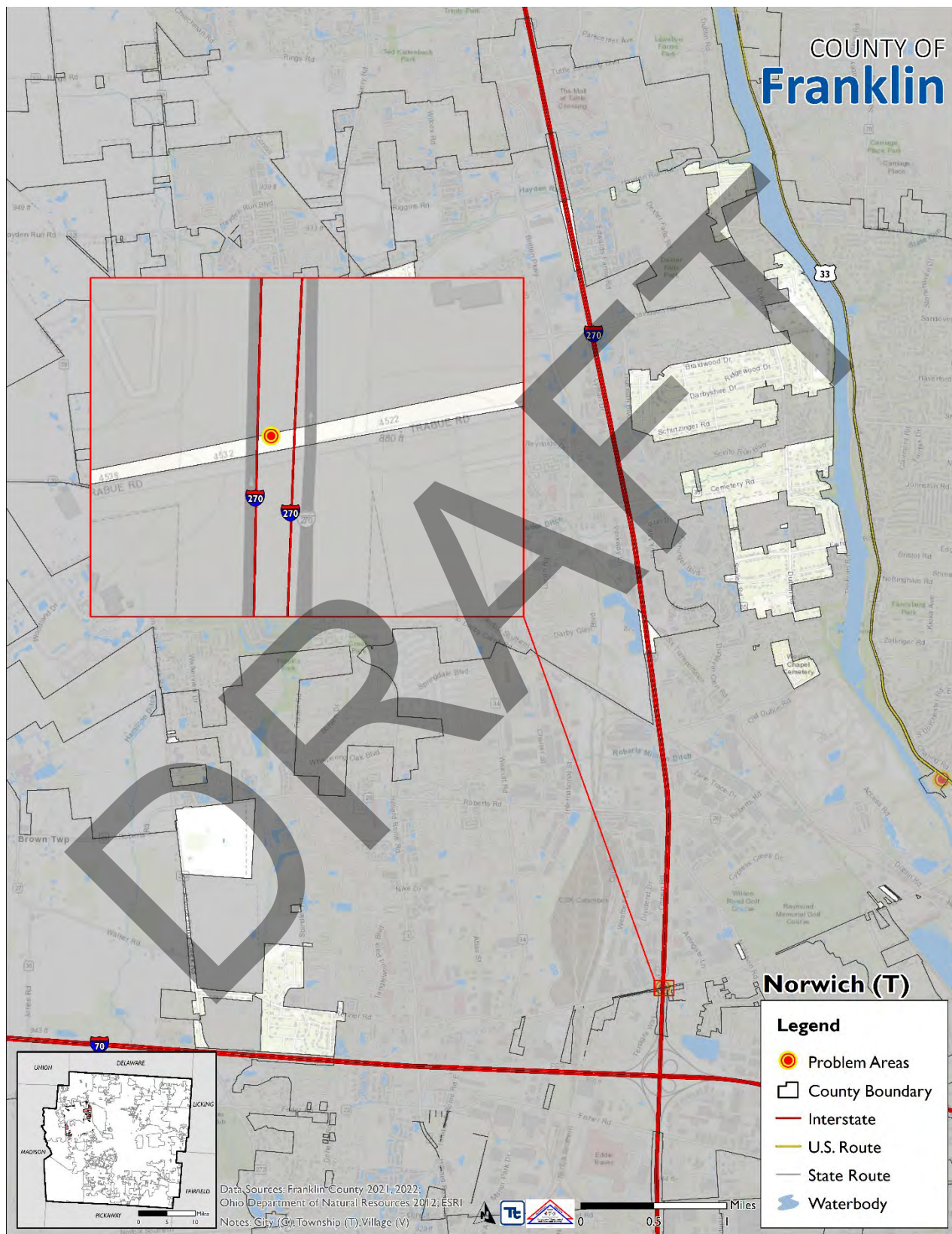


Figure 9.26-4. Township of Norwich Hazard Area Extent and Location Map – Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Norwich Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Norwich Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.26-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township of Norwich experienced no damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township of Norwich experienced no damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of

Norwich. The Township of Norwich reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.26-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temperatures	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Low
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.26-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Norwich Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	2	2
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Norwich Township identified the following vulnerabilities within its community:

- Critical facilities in the Township do not have back-up power.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.26.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.26-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Mitigate Power failure through the purchase of Generators	Township Trustee's Office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Norwich identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Township of Norwich has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Norwich participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.26-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	-	X	-	X	-	X	X	-	-	X
Disease Outbreak	-	X	-	X	-	X	X	-	-	X
Drought	-	X	-	X	-	X	X	-	-	X
Earthquake	-	X	-	X	-	X	X	-	-	X
Extreme Temperatures	-	X	-	X	-	X	X	-	-	X
Flood	-	X	-	X	-	X	X	-	-	X
Geologic	-	X	-	X	-	X	X	-	-	X
Invasive Species	-	X	-	X	-	X	X	-	-	X
Severe Summer Weather	-	X	-	X	-	X	X	-	-	X
Severe Winter Weather	-	X	-	X	-	X	X	-	-	X
Tornadoes	-	X	-	X	-	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.28-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Norwich Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.26-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Norwich-001	Critical facility Back-Up Generator	Problem: No critical facilities in the Township currently have back-up power. Solution: Install a back-up/emergency generator and transfer switch to the identified critical facility(ies).	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	6	3 years	Township Trustee's Office	BRIC, HMGP	Medium	Medium	Medium	SIP	PP, ES
2023-Norwich-002	All-Hazards Education	Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Township. Solution: Work with Franklin County EM&HS to provide residents with the necessary information to understand the threats of all hazards and	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather,	2, 4, 5	2 years	Franklin County EM&HS and Township Trustee's Office	HMGP, Local Funds	High	Low	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		protect themselves and their property.	Tornadoes									

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

- *Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.26-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Norwich-001	Critical facility Back-Up Generator	1	1	1	1	1	1	0	-1	0	1	1	1	0	0	8	Medium
2023-Norwich-002	All-Hazards Education	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.26 TOWNSHIP OF NORWICH

This section presents the jurisdictional annex for the Township of Norwich that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Norwich participated in the planning process, an assessment of the Township of Norwich's risk and vulnerability, the different capabilities used in the Township of Norwich, and an action plan that will be implemented to achieve a more resilient community.

9.26.1 Hazard Mitigation Planning Team

The Township of Norwich identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.26-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Jamie Fisher / Township Administrator	Name/Title:	Robbie Thomas / Road Superintendent
Address:	5181 Northwest Parkway, Hilliard, Ohio 43026	Address:	3225 Dublin Rd, Hilliard, OH 43026
Phone Number:	(614) 876-3328	Phone Number:	(614) 876-2236
Email:	jamie_fisher@norwichtownship.org	Email:	robbie_thomas@norwichtownship.org
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors			
Name/Title:	No additional contributors		
Method of Participation:			

9.26.2 Municipal Profile

The Township of Norwich is in the northwest area of Franklin County and is bordered by Washington Township to the north, Perry Township to the east, Brown Township to the west and Prairie and Franklin Townships to the South. The Township is composed of several small “islands” which are separated due to annexations, most of the annexations being by the City of Columbus.

According to the American Community Survey, the 2021 population for the Township of Norwich was 37,356, a 17.45 percent increase from the 2010 Census population of 31,807. Data from the 2021 American Community Survey indicates that 6 percent of the population is 5 years of age or younger and 11.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.26.3 Jurisdictional Capability Assessment and Integration

The Township of Norwich performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Norwich to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

It should be noted that the City of Hilliard and Franklin County provides a majority of services to the Township of Norwich. For details on the City’s capabilities, refer to Section 9.15, and for the County’s capabilities refer to Section 9.1 and Section 5 (Capability Assessment). The following section provides capabilities within the Township of Norwich.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Norwich and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.26-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution – October 11, 2022	Franklin County	Franklin County Zoning Officer
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Structures are not permitted to be built in the floodplain.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations – March 27, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Franklin County Stormwater Drainage Manual – March 13, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Franklin County's Flood Damage Reduction Regulation – September 19, 2007	Franklin County	Franklin County Floodplain Administrator
<i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	Franklin County	Stormwater Executive Committee
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Norwich to oversee and track development.

Table 9.26-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Residential permits are issued by the Franklin County Economic Development & Planning Department; commercial permits are issued by the State of Ohio. Zoning complaints are dealt with through the Franklin County Zoning Division.
If you do not issue development permits, what is your process for tracking new development?	N/A	Coordinate with the Franklin County Building Department.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The Township of Norwich does not track permits; it coordinates with the Franklin County Building Department to maintain its list.
Do you have a buildable land inventory? • If yes, please describe	No	The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Norwich and their current responsibilities that contribute to hazard mitigation.

Table 9.26-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Norwich Township Road Department is responsible for maintaining 13.7 miles of roadways within the unincorporated areas of Norwich Township. Maintaining roadways involves snow removal, roadway and drainage repairs, street sweeping, road sign management, and services maintained within the public right of ways, such as removal of dead animals, tree removal, and sidewalk repairs.</p> <p>The Norwich Township Road Department consists of a Road Superintendent and 3 full-time Road Laborers.</p>
Construction/Building/Code Enforcement Department	No	Zoning complaints are dealt with through the Franklin County Zoning Division.
Emergency Management/Public Safety Department	Yes	The Norwich Township Fire Department provides fire prevention, suppression, Emergency Medical Services, and fire



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		safety/prevention education programs for the residents of Norwich Township. The Norwich Township Fire Department consists of 91 full-time firefighters at three stations, which includes an administrative staff of five who manage Prevention Programs and Services, Training, and Emergency Medical Services. The department's three stations are strategically located within the Township to facilitate quick response time on emergency calls to any part of the Township.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Franklin County's warning system
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Norwich Township Road Department is responsible for snow removal, roadway and drainage repairs, street sweeping, road sign management, and services maintained within the public right of ways, such as removal of dead animals, tree removal, and sidewalk repairs.
Mutual aid agreements	No	-
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	-	-
Engineers or professionals trained in building or infrastructure construction practices	-	-
Planners or engineers with an understanding of natural hazards	-	-
Staff with expertise or training in benefit/cost analysis	-	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)		Consider the following: Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Township of Norwich.

Table 9.26-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas, or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Norwich.

Table 9.26-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook Twitter, Instagram, and YouTube
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Franklin County's Warning System
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	The Township utilizes their social media accounts to perform public outreach for the described purposes. There are also programs through Focus Hilliard which concentrate on Fire Safety Education.

Community Classifications

The table below summarizes classifications for community programs available to the Township of Norwich.

Table 9.26-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.26-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.26.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Norwich.

Table 9.26-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Norwich (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Norwich.

Table 9.26-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	No
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	Unknown
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	Yes
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure

NFIP Topic	Comments
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.26.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.26-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.26-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.26.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Norwich's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Norwich has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.26-1. Township of Norwich Hazard Area Extent and Location Map - Flood

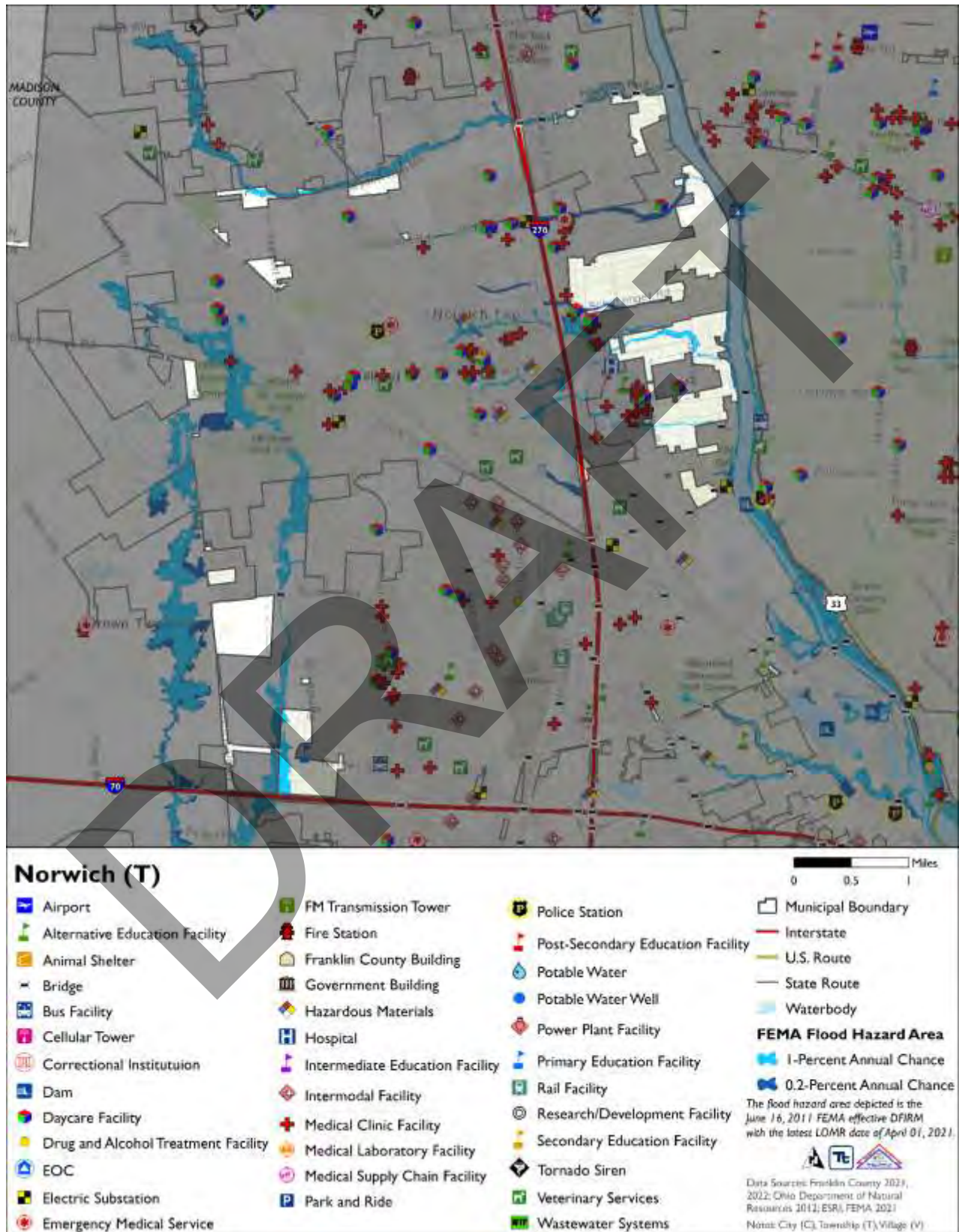


Figure 9.26-2. Township of Norwich Hazard Area Extent and Location Map – Land Subsidence

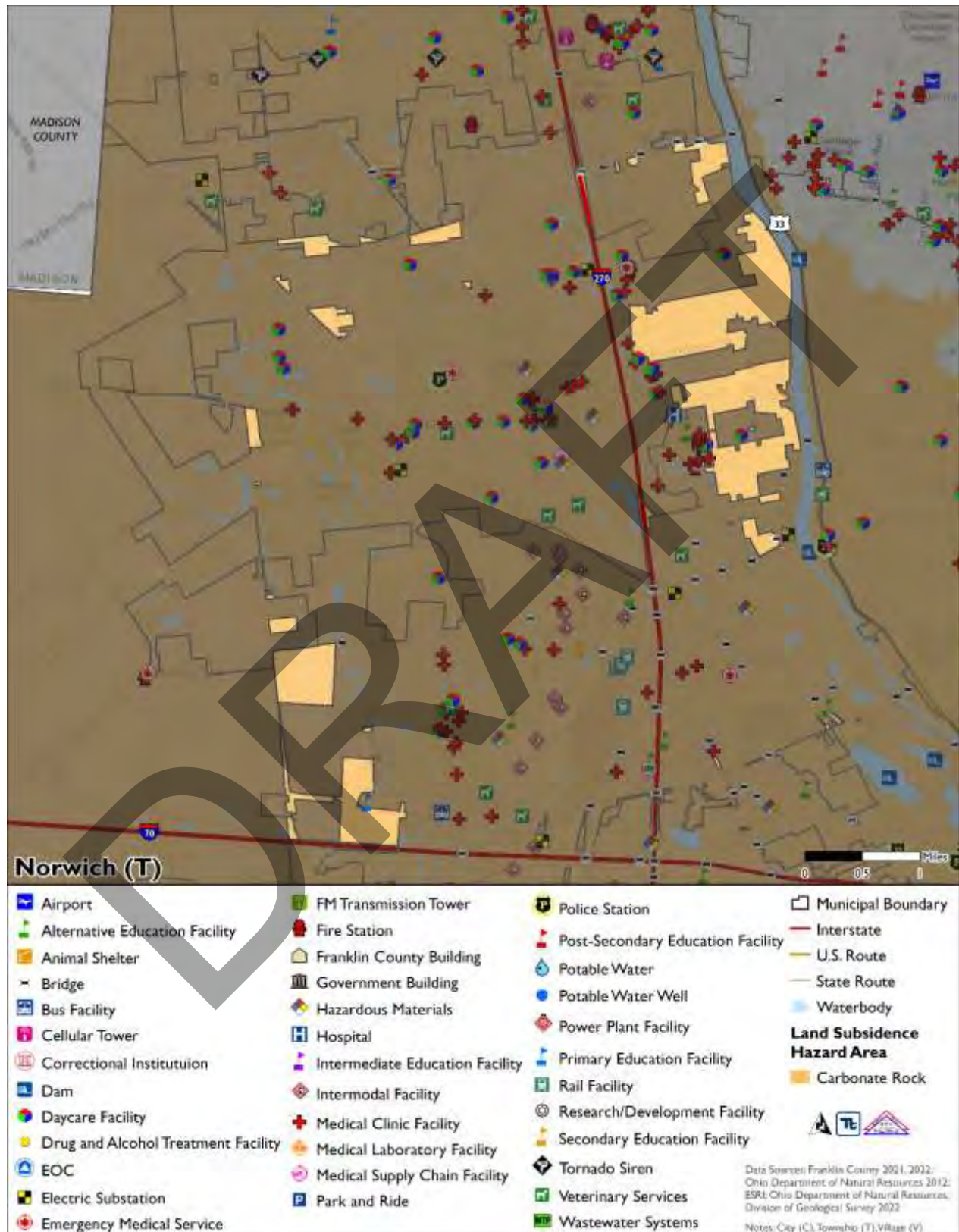


Figure 9.26-3. Township of Norwich Hazard Area Extent and Location Map – Inland Erosion

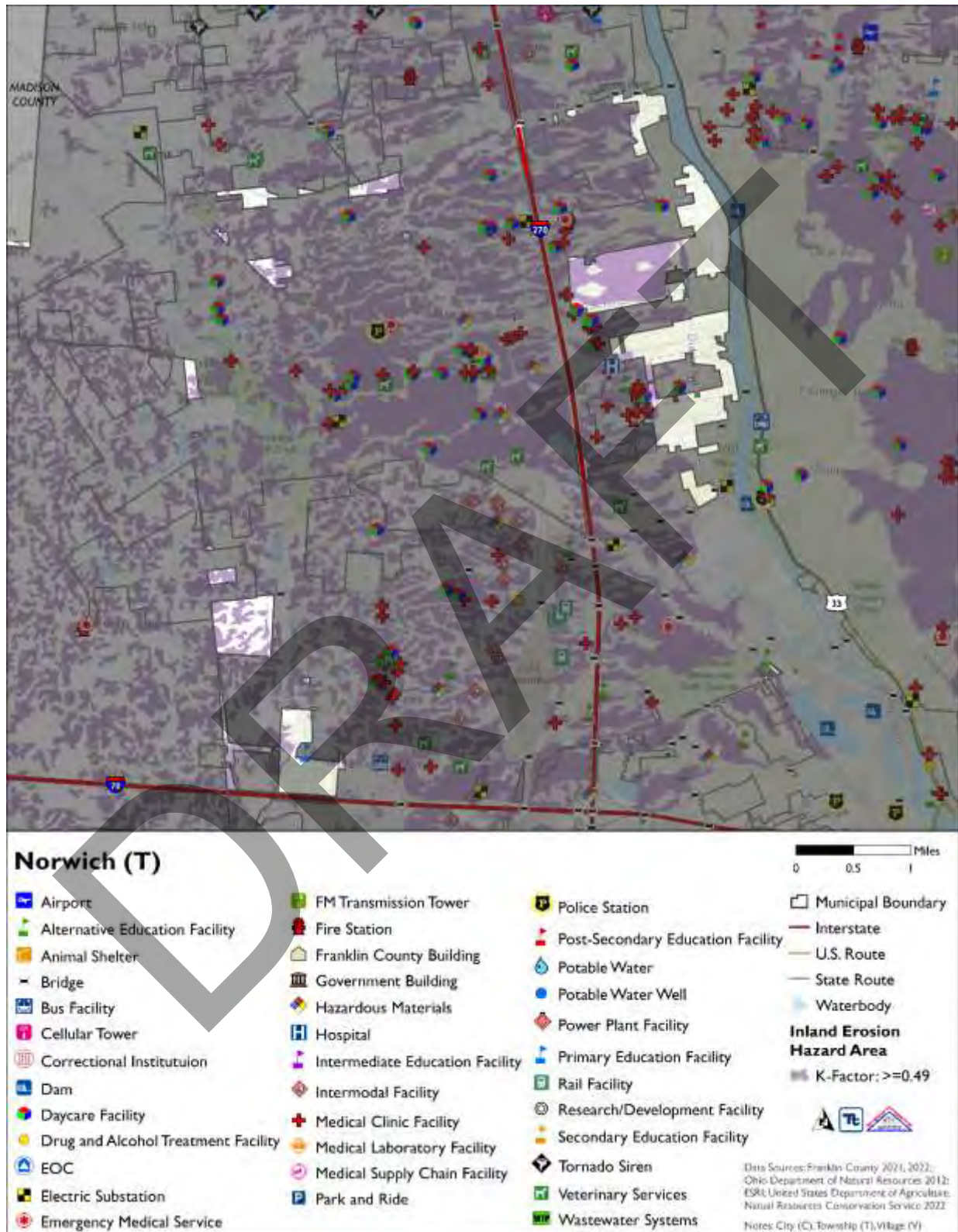
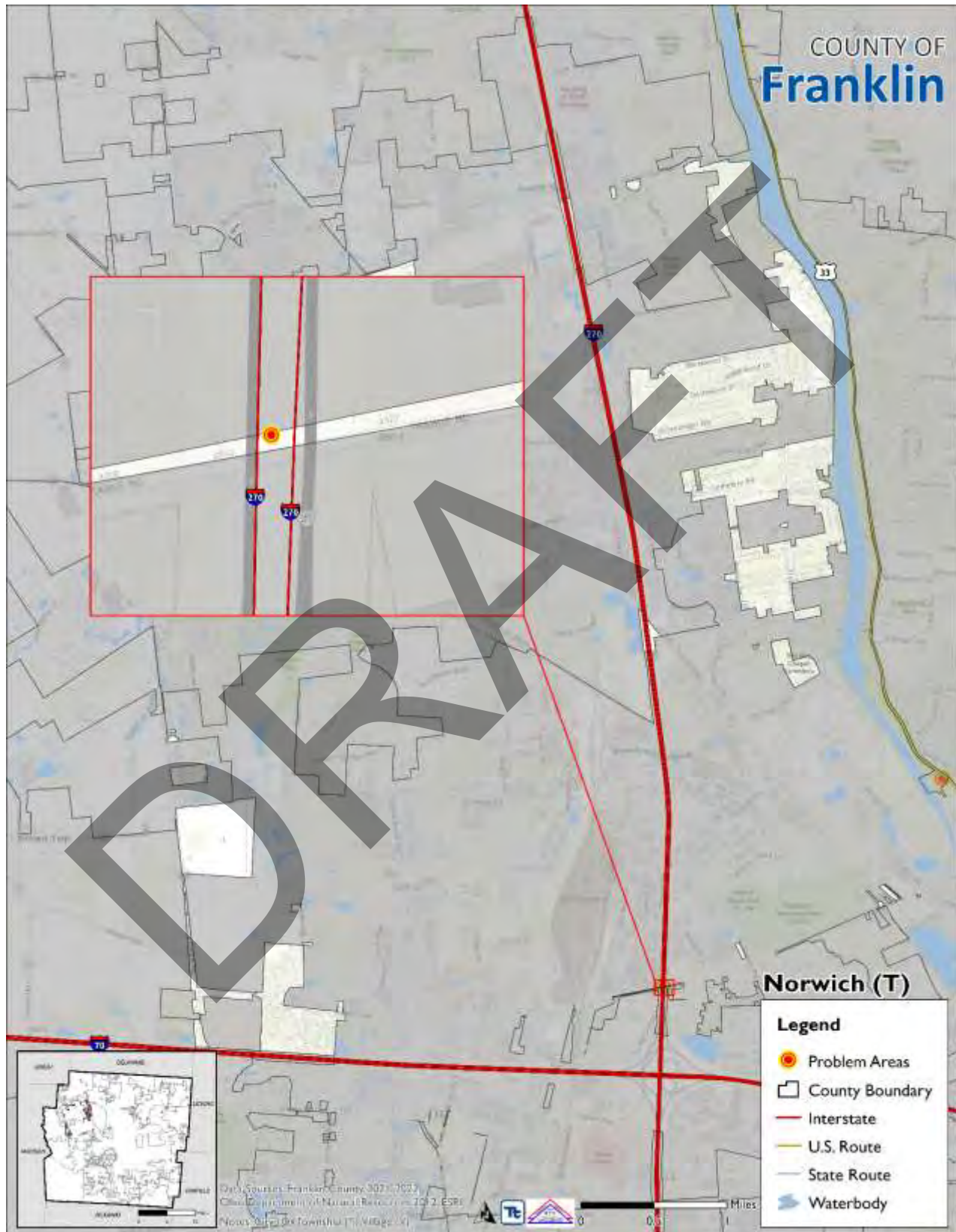


Figure 9.26-4. Township of Norwich Hazard Area Extent and Location Map – Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Norwich Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Norwich Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.26-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township of Norwich experienced no damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township of Norwich experienced no damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of

Norwich. The Township of Norwich reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.26-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temperatures	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Low
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.26-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Norwich Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	2	2
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Norwich Township identified the following vulnerabilities within its community:

- Critical facilities in the Township do not have back-up power.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.26.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.26-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Mitigate Power failure through the purchase of Generators	Township Trustee's Office	-	-	-	-

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Norwich identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Township of Norwich has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Norwich participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.26-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	-	X	-	X	-	X	X	-	-	X
Disease Outbreak	-	X	-	X	-	X	X	-	-	X
Drought	-	X	-	X	-	X	X	-	-	X
Earthquake	-	X	-	X	-	X	X	-	-	X
Extreme Temperatures	-	X	-	X	-	X	X	-	-	X
Flood	-	X	-	X	-	X	X	-	-	X
Geologic	-	X	-	X	-	X	X	-	-	X
Invasive Species	-	X	-	X	-	X	X	-	-	X
Severe Summer Weather	-	X	-	X	-	X	X	-	-	X
Severe Winter Weather	-	X	-	X	-	X	X	-	-	X
Tornadoes	-	X	-	X	-	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.26-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Norwich Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.26-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Norwich-001	Critical facility Back-Up Generator	<p>Problem: No critical facilities in the Township currently have back-up power.</p> <p>Solution: Install a back-up/emergency generator and transfer switch to the identified critical facility(ies).</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	6	3 years	Township Trustee's Office	BRIC, HMGP	Medium	Medium	Medium	SIP	PP, ES
2023-Norwich-002	All-Hazards Education	<p>Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Township.</p> <p>Solution: Work with Franklin County EM&HS to provide residents with the necessary information to understand the threats of all hazards and</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather,	2, 4, 5	2 years	Franklin County EM&HS and Township Trustee's Office	HMGP, Local Funds	High	Low	High	EAP	PI



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		protect themselves and their property.	Tornadoes									

*Mitigation initiative is related to a critical facility and/or community lifeline
 Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.26-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Norwich-001	Critical facility Back-Up Generator	1	1	1	1	1	1	0	-1	0	1	1	1	0	0	8	Medium
2023-Norwich-002	All-Hazards Education	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.27 CITY OF OBETZ

This section presents the jurisdictional annex for the City of Obetz that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Obetz participated in the planning process, an assessment of the City of Obetz’s risk and vulnerability, the different capabilities used in the City of Obetz, and an action plan that will be implemented to achieve a more resilient community.

9.27.1 Hazard Mitigation Planning Team

The City of Obetz identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from representatives from many City of Obetz departments, including Deputy Safety Director, City Administrator and the Director of Community Services.

The fire chief and city administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team, meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.27-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	E. Rod Davisson, Administrator	Name/Title:	Jess Griffith, Deputy Safety Director
Address:	4175 Alum Creek Drive Obetz, Ohio 43207	Address:	4175 Alum Creek Drive Obetz, Ohio 43207
Phone Number:	614.491.1080	Phone Number:	614.491.1080
Email:	rdavisson@obetz.oh.us	Email:	jgriffith@obetz.oh.us
NFIP Floodplain Administrator			
Name/Title:	Michael Corbitt, PE, Deputy Administrator/City Engineer		
Address:	4175 Alum Creek Drive Obetz, Ohio 43207		
Phone Number:	614.491.1080		

Email:	mcorbitt@obetz.oh.us
Additional Contributors:	
Name/Title:	Stacey Boumis, AICP, Community Services Director/Planner/Clerk
Method of Participation:	Planning Committee Member, Point of Contact and participated in training meetings, completed Homework tasks.

9.27.2 Municipal Profile

The City of Obetz is in the southern area of Franklin County and is bordered by Madison Township and the City of Groveport to the east. Parts of Hamilton Township border Obetz City to the west and south and Columbus borders the City to the north. Big Walnut Creek cuts through Obetz east to west.

According to the 2020 Census, the City's population was 5,489, a 21.1-percent increase from the 2010 Census population of 4,532. Data from the 2021 American Community Survey indicates that 4.9 percent of the population is 5 years of age or younger and 10.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.27.3 Jurisdictional Capability Assessment and Integration

The City of Obetz performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Obetz to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Obetz and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.27-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part Thirteen of the Obetz Codified Ordinances	Local	Building Department
<i>How does this reduce risk?</i> The City of Obetz has its own building department and follows the State building codes. The Building Code ensures buildings are safe as it incorporates the latest safety standards to address known hazards to the community. Any updates promulgated by the State of Ohio are automatically enforced in the City of Obetz. As stated above, the City follows all required building codes in the State of Ohio.				
Zoning/Land Use Code	Yes	Part Eleven, Title Three, Planning and Zoning Code of the Obetz Codified Ordinances; original zoning code adopted in 1982	Local	Planner; Engineer; Code Enforcement; Building Dept
<i>How does this reduce risk?</i> During development plan review, wetlands, floodways, and floodplains are identified and preserved. Also, a hazard analysis is conducted to ensure consistent and compatible land use. The zoning code also contains tree preservation requirements to limit the removal of trees. The City's Zoning Code has not been updated since the 2018 HMP to allow for Plan integration, but as indicated above the City has previously integrated regulations and design criteria in the Ordinance that preserves and protects existing trees and vegetation, floodplains, stream corridors, and other areas of environmental significance from adverse impacts of development.				
Subdivision Ordinance	Yes	Part Eleven, Title One of the Obetz Codified Ordinances; original subdivision regulations adopted in 1982	Local	Engineer
<i>How does this reduce risk?</i> Ensures responsible development after zoning approval. The location of natural hazard areas are identified during the zoning process and then the subdivision process is an additional check to ensure those areas are preserved. The City's Subdivision Regulations have not been updated since the 2018 HMP but the City's review process and design criteria works to preserve and protect existing trees and vegetation, floodplains, stream corridors, and other areas of environmental significance from adverse impacts of development by protecting natural areas.				
Site Plan Ordinance	Yes	Part Eleven, Title One, of the Zoning Code – Chapter 1137	Local	Planner; Engineer
<i>How does this reduce risk?</i> During development plan review, wetlands, floodways, and floodplains are identified and preserved. Also, a hazard analysis is conducted to ensure consistent and compatible land use.				
Stormwater Management Ordinance	Yes	Part Eleven, Title One of the Zoning Code – Chapter 1137	Local	Planner; Engineer
<i>How does this reduce risk?</i> The City's Stormwater Management Ordinance reduces risk by managing stormwater runoff and mitigating the potential effects of flooding, erosion, and water pollution. It also protects water quality and infrastructure by managing the volume and rate of stormwater runoff.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Flood Damage Reduction Regulations – Part 17 of the Codified Ordinances; adopted in 2006	Local	Engineering and Planning
<i>How does this reduce risk?</i> In addition to the required regulations, it contains additional protections including the riparian buffer zone on the Big Walnut Creek (1704.13) and the compensatory storage for fill requirement (1704.10(d)). This protects land downstream.				
Wellhead Protection	Yes	Wellhead Protection Plan created in 1995	Local	Engineering, Planning, and Utilities
<i>How does this reduce risk?</i> Provides guidance on appropriate land uses in the wellhead protection area. It also identifies a wellhead protection zone.				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	1. Southwest Area Plan – 2022 2. Rickenbacker Area Study – 2018 3. Insight 2050 – 2015 4. Insight 2050 Corridor Concepts (studied Groveport Road and Alum Creek Drive) – 2019 5. Central Ohio Regional Housing Strategy – 2020 6. Walnut Creek Retail Center Plan – 2015 7. Triangle Area Land Use Plan – 2002	Local	Engineering and Planning
<i>How does this reduce risk?</i> Guides development to areas with infrastructure; preserves open space; discourages development in natural hazard areas.				
Capital Improvement Plan	Yes	Updated yearly as a part of the budgeting process	Local	Engineering; Administration
<i>How does this reduce risk?</i> Targets investment in infrastructure.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	1. Big Walnut Watershed Planning Partnership Balanced Growth Plan – 2012 2. Rapid 5 – 2021 These documents are exclusive of each other	Local	Planning
<i>How does this reduce risk?</i> Identifies drinking water protection zones; priority preservation areas; and priority development areas				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Stormwater Management Plan	Yes	2021-2025 Stormwater Management Program Plan submitted in 2021 to OEPA Obetz also follows the Ohio EPA's Rainwater and Land Development Manual	Local	Engineering
<i>How does this reduce risk?</i> Ensures management of stormwater to avoid flooding; reduces contamination of stormwater; IDDE activities help prevent/eliminate pollution of surface water				
Open Space Plan	Yes	Component of Multiple Planning Documents	Local	Planning
<i>How does this reduce risk?</i> Identifies priority preservation areas; responsible development of land; minimize flooding through floodplain preservation				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	Yes	1. Component of Multiple Planning Documents adopted at various times 2. Columbus Region Comprehensive Economic Development Strategy - 2021	Local	Planning/Development
<i>How does this reduce risk?</i> Guides development to areas with infrastructure.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	Yes	2022 – Urban Tree Canopy Project Zoning code limits removal of trees as well	Local	Planning, Grounds, and Engineering
<i>How does this reduce risk?</i> Identifies tree preservation areas				
Transportation Plan	Yes	1. Mid-Ohio Regional Planning Commission's (MORPC) 2016 Active Transportation Plan 2. MORPC 2020-2050 Metropolitan Transportation Plan (effective 7/2020; amended 9/21 and 9/22) 3. Transportation components in land use, watershed, and area plans	County	Central Ohio's regional council
<i>How does this reduce risk?</i> Targets transportation improvements to developed areas; minimizes improvements in preservation areas; takes a regional look at the transportation system				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	Yes	2020	Local	City Administration
<i>How does this reduce risk?</i> Maintains essential functions of the operation				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i> Obetz contracts with Franklin County Public Health for all health services. The City follows along with the County.				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Obetz to oversee and track development.

Table 9.27-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning

Indicate if your jurisdiction implements the following	Yes/No	Comment:
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development permits are tracked separately but otherwise, permits are not tracked by hazard area.
Do you have a buildable land inventory? If yes, please describe	Yes	Planning documents are used as a visual guide.
Describe the level of build-out in your jurisdiction.	N/A	85% built out or under construction

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Obetz and their current responsibilities that contribute to hazard mitigation.

Table 9.27-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Enforcement of zoning code including review of site plans; creation of plans and land use policies
Zoning Board of Adjustment	Yes	The Planning and Zoning Commission serves as the BZA
Planning Department	Yes	Enforcement of zoning code; creation of plans and land use policies
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	While not a formally created Board/Commission, the Planning and Zoning Commission creates policies and plans that guide the preservation of open space within the community and preserve the environmental resources.
Open Space Board/Committee	Yes	While not a formally created Board/Commission, the Planning and Zoning Commission creates policies and plans that guide the preservation of open space within the community.
Economic Development Commission/Committee	Yes	While not a formally created Board or Commission, the Planning and Zoning Commission creates policies and plans that guide economic development.
Public Works/Highway Department	Yes	Utilities Dept. – 6 FT Street Dept. – 6 FT; 4 PT Grounds Dept. – 2 FT
Construction/Building/Code Enforcement Department	Yes	In-house building dept. and code enforcement – 4 people in house plus on-going contract with consulting firm
Emergency Management/Public Safety Department	Yes	Obetz Police Dept.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Lighting detection system at splashpad and in Memorial Park where the stadium and outdoor sports fields are located; 3 tornado sirens
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Yearly maintenance of storm system; street tree maintenance program
Mutual aid agreements	Yes	Both police dept. and fire dept. (Obetz is split between Hamilton Township FD and Madison Township FD)
Human Resources Manual	Yes	FT Human Resources Director; Deputy Safety Director position
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	City Planner and Two FT City Engineers

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Engineers or professionals trained in building or infrastructure construction practices	Yes	City Engineer; Chief Building Official; Code Enforcement Officer; Utilities Engineer
Planners or engineers with an understanding of natural hazards	Yes	City Engineer; City Planner; Utilities Engineer; Chief Building Official
Staff with expertise or training in benefit/cost analysis	Yes	Finance Director; City Manager; Economic Development Director
Professionals trained in conducting damage assessments	Yes	Chief Building Official; Code Enforcement Officer; City Engineer; Utilities Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	City Engineer; Utilities Engineer
Environmental scientist familiar with natural hazards	Yes	Not on staff; Obetz has an on-going contract with Franklin County Soil and Water Conservation District
Surveyor(s)	Yes	Not on staff but Obetz has a contract with an engineering/surveying company
Emergency Manager	Yes	City Manager; Deputy City Manager
Grant writer(s)	Yes	All Directors are skilled grant writers
Resilience Officer	Yes	Deputy Safety Director
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	City Planner who has a background in environmental science

Fiscal Capability

The table below summarizes financial resources available to the City of Obetz.

Table 9.27-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – limited to a small part of the City only
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes – eligible to use but don't have
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Obetz is a charter municipality

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Obetz.

Table 9.27-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	FT staff member - has access to website and all social media platforms

Outreach Resources	Available? (Yes/No)	Comment:
		2 additional staff members have access to websites and social media platforms as a backup
Personnel skilled or trained in website development	Yes	2 FT staff members; can post to multiple city owned sites
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Lightning detection system with siren to warn people and tornado sirens
Natural disaster/safety programs in place for schools	Yes	Obetz is split between the Hamilton Local School District and Groveport Madison School District. Both districts have natural disaster/safety programs.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Obetz can post information on its website and social media platforms as necessary

Community Classifications

The table below summarizes classifications for community programs available to the City of Obetz.

Table 9.27-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	no structures in the floodplain	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	Obetz has its own building department that enforces the Ohio Building Codes	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Madison Township = 3 Hamilton Township = 3	Obetz is served by two FD
Storm Ready Certification	Yes	Franklin County is a Storm Ready County	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.27-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Medium
Extreme Temperature	Medium
Flood	Medium
Geologic	Medium
Invasive Species	Medium
Severe Summer Weather	Moderate
Winter Storm	High
Tornado	High

9.27.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Obetz.

Table 9.27-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Obetz (C)	1	0	\$0.00	NR	NR

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Obetz.

Table 9.27-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No areas prone to flooding No known properties that have been damaged by flooding

NFIP Topic	Comments
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No. No homeowners/businesses interested in mitigation
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Engineering
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	Yes; continued education of any new requirements
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit; GIS; Engineering review
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	If a building permit is required
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Part 17 of the Obetz Codified Ordinances last amended on 5/8/2006
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Exceeds; refer to Part 17 of the Codified Ordinances Compensatory fill requirement and buffer on Big Walnut Creek
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Site plan review required Planning and Zoning Commission, City Engineer, and City Planner all consider efforts to reduce flood risk when reviewing site plans/variances
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No



9.27.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

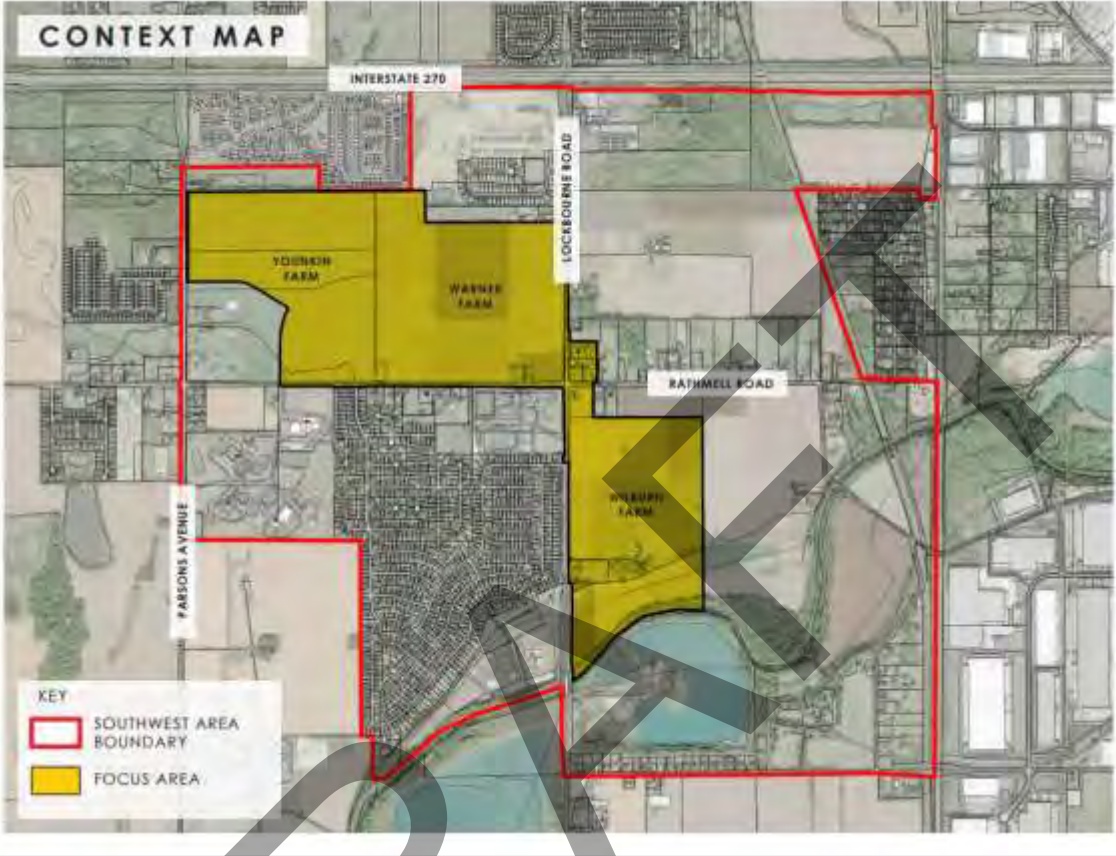
Table 9.27-11. Number of Building Permits for New Construction Since the Previous HMP

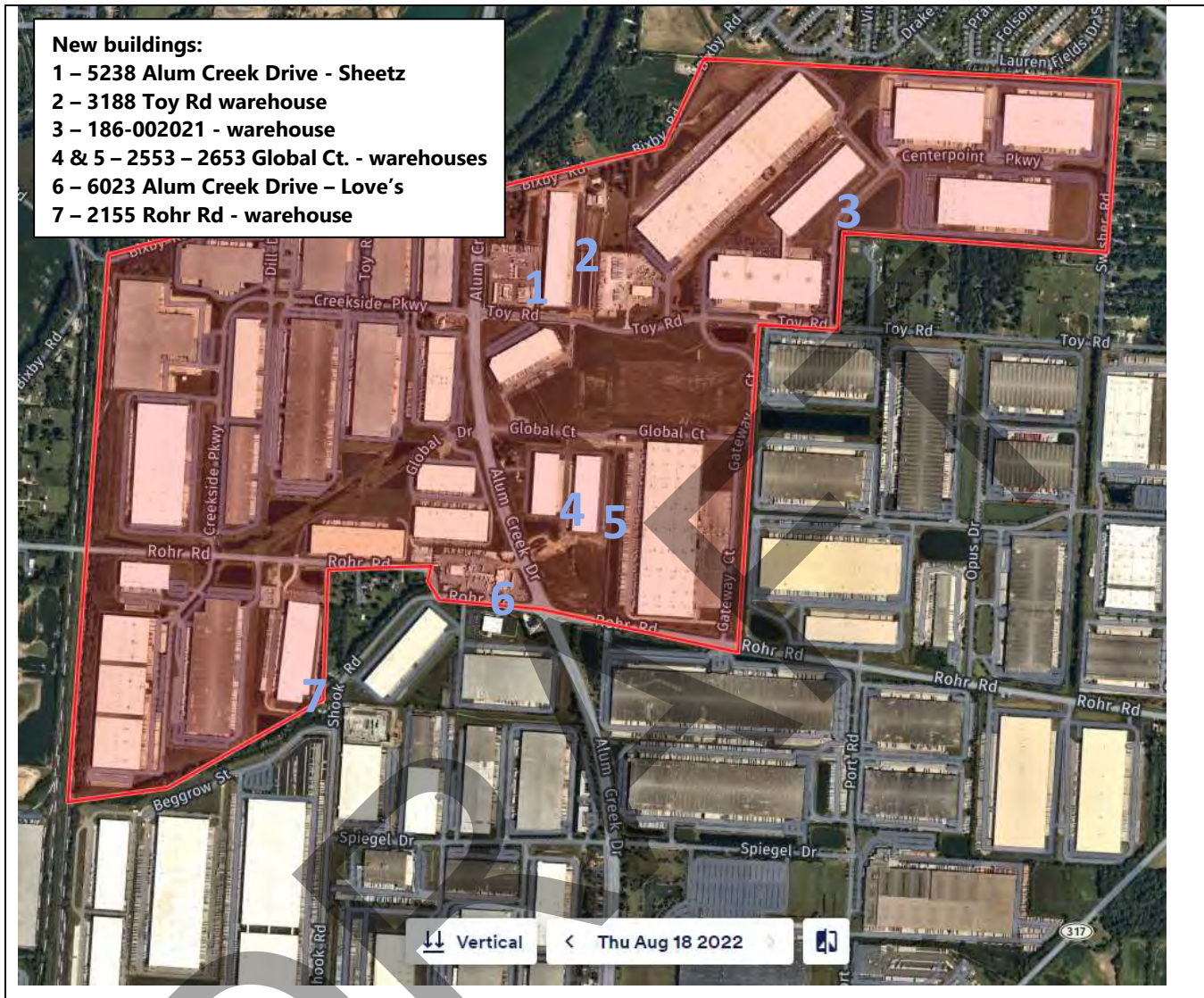
Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	41	0	74	0	134	0	116	0	98	0
Multi-Family	0	0	0	0	0	0	145	0	308	0
Other (commercial, mixed-use, etc.)	4	0	3	0	5	0	4	0	0	0
Total Permits Issued	45	0	77	0	139	0	265	0	406	0

Table 9.27-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Fortress Obetz	Public	N/A	2015 Recreation Trail	No	Stadium; Completed
Big Walnut Run	SF Residential	166	Bixby Road; south of Groveport Road	No	Under construction; 50% completed 
Redwood	MF Residential	165	186-002023	No	Nearing completion
Butler Farms	SF Residential	254	West side of Lockbourne Road; south of I-270	No	 95% complete

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Buckstone Flats	MF Residential	288	152-002168	No	Nearing Completion
Buckstone Bend	SF Residential	252	152-002170; 152-002161; 152-002169; 152-002162	No	8 building permits have been issued; no home completed as of June 2023
Known or Anticipated Major Development in the Next Five (5) Years					
Commercial Development Area	Commercial	n/a	Parcel: 152-000851	None	Not yet approved by the City
Commercial Development Area	Commercial	n/a	Parcel 152-001466	None	In planning phase
Walnut Creek Retail and Medical Center	Commercial and Medical	n/a	west side of Alum Creek; from Maureen Blvd N. to Lindsay Road	None	Parts already approved; some parts vacant and in the planning phase; Several sites completed including a freestanding emergency room operated by OhioHealth
Buckstone	Mixed use – commercial, office, institutional, SF and MF Residential	Approximately 1000 new residential units anticipated; square footage of other development types unknown	See context map below; Buckstone area shaded in yellow	None	One SF subdivision and one MF project under construction now

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
					
<p>Parcel 150-002713 will be deeded to Obetz as a part of the project. This is all the land within the 100 year floodplain. Commercial/Mixed Use development planned on the following parcels within the next 5 years:</p> <ul style="list-style-type: none"> • 152-000851 • 152-001544 • 152-001466 • 153-000160/153-000168/153-000169/153-000031 – one project – parcel combination has not occurred but planned • 153-000249 • 153-000034 • 153-000036 • 153-000035 • 153-000020 					
<p>Industrial/warehouse development planned on the following parcels within the next 5 years:</p> <ul style="list-style-type: none"> • 152-001937 • 186-002016 • 153-000673 • 153-000010 • 153-000006 • 186-000408 					



Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.27.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Obetz’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which the City of Obetz has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.27-1. City of Obetz Hazard Area Extent and Location Map – Flood

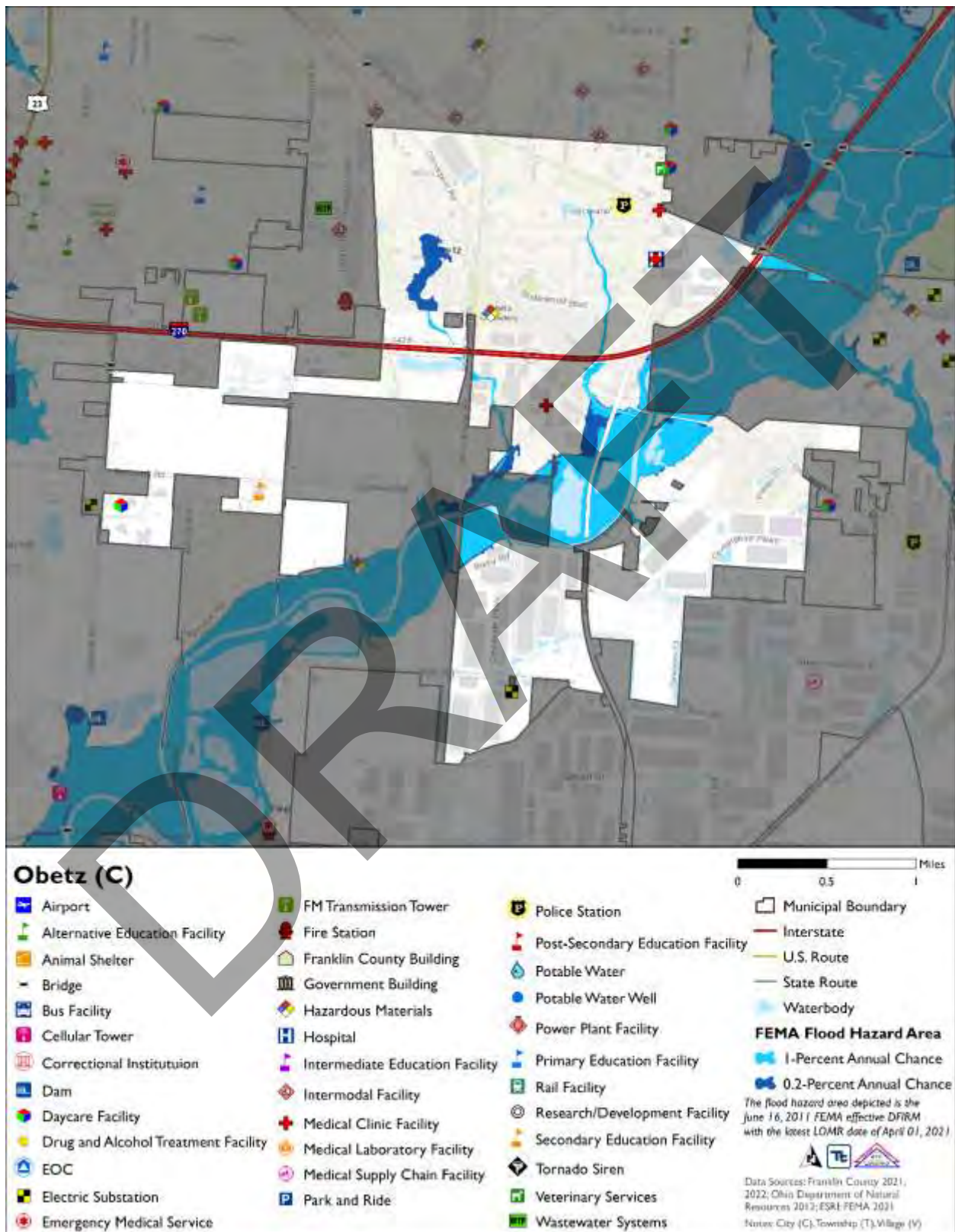


Figure 9.27-2. City of Obetz Hazard Area Extent and Location Map – Inland Erosion

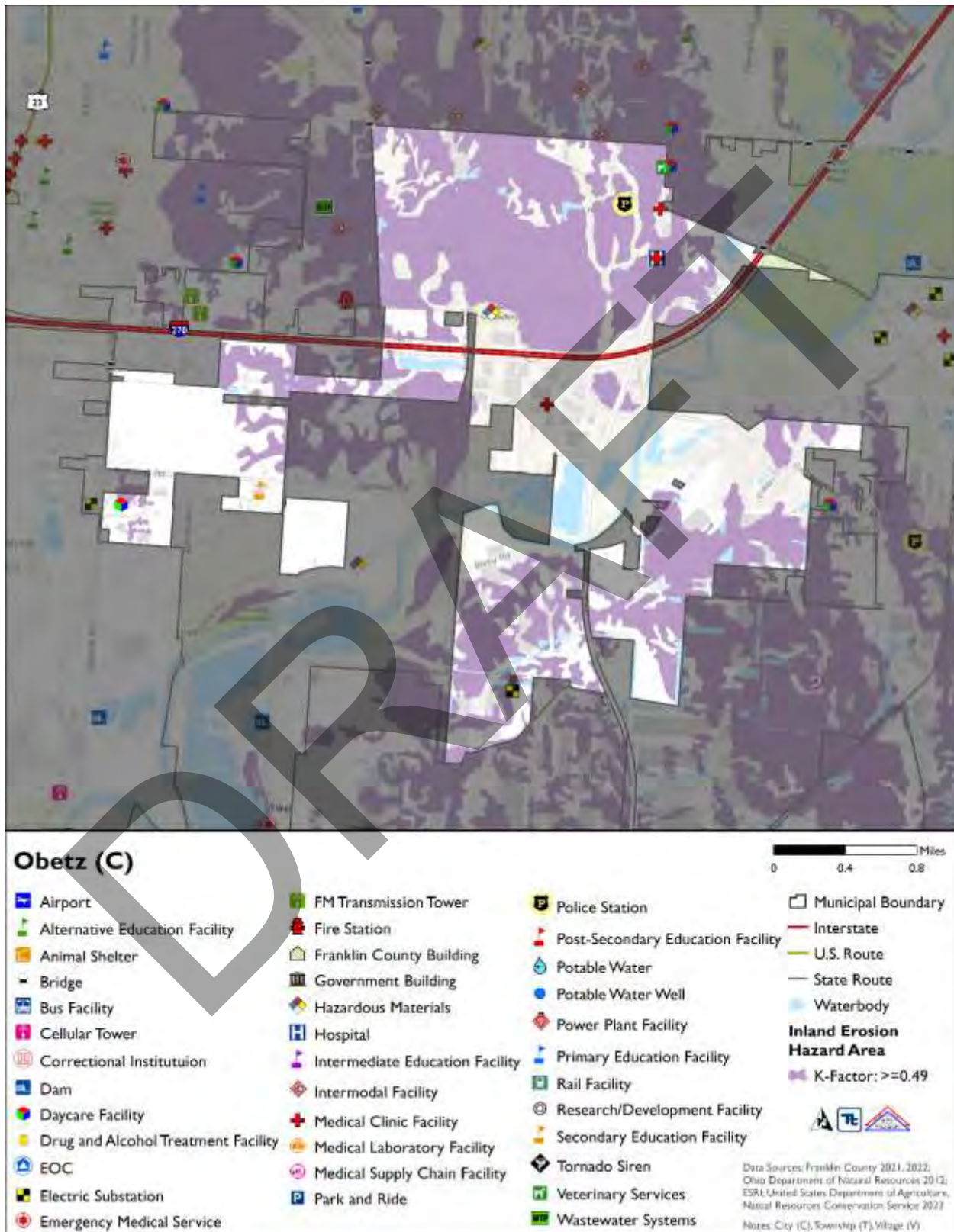
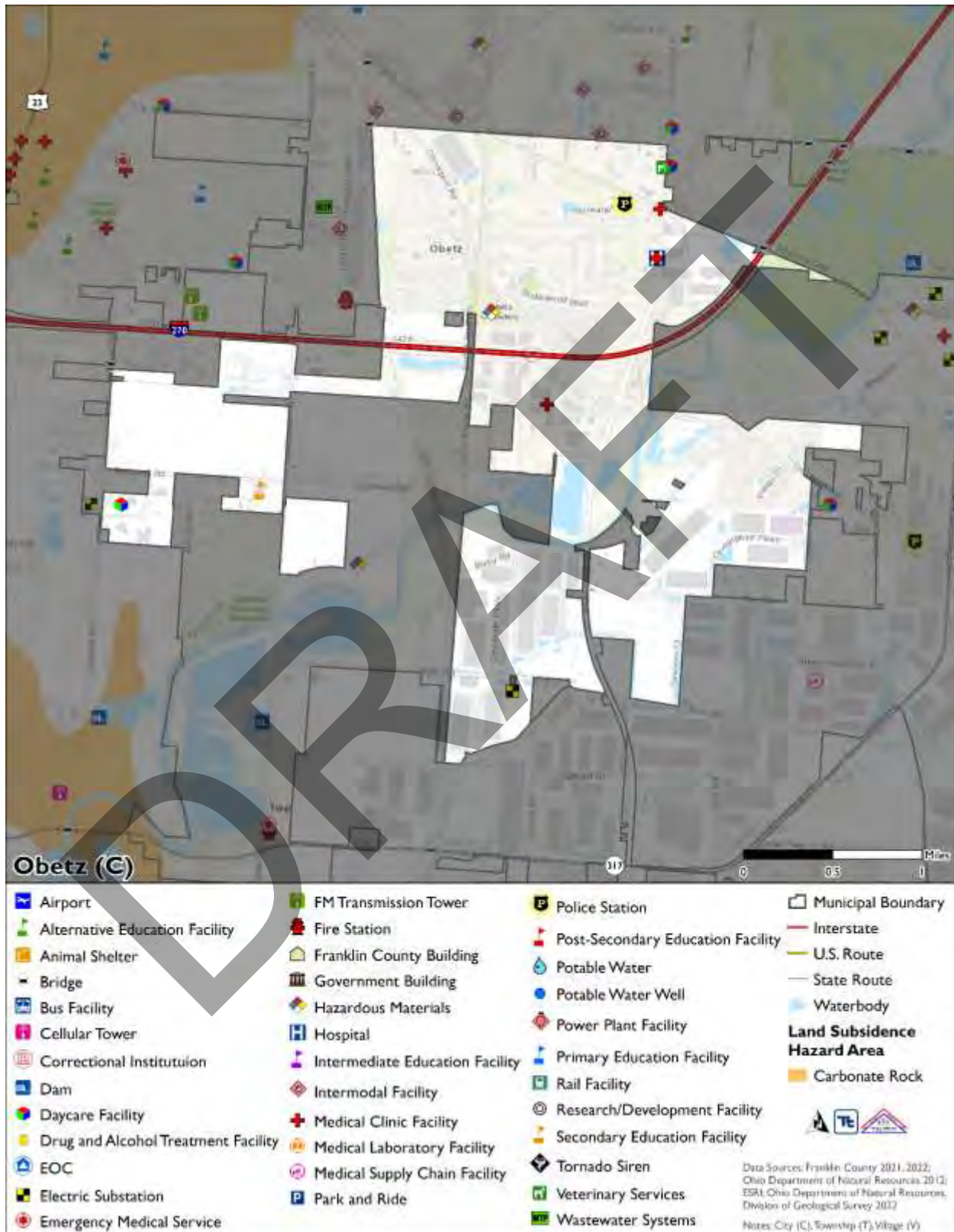


Figure 9.27-3. City of Obetz Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Obetz's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Obetz experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.27-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	\$24,567.46 for tree removal and overtime hours associated with clean-up of damage
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	While this event impacted Franklin County, the City did not report any damages as a result of this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low- pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	While this event impacted Franklin County, the City did not report any damages as a result of this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	See chart below for lost staff time associated with COVID

Figure 9.27-4. COVID Statistics for the City of Obetz

Estimated COVID Hours & Costs			
2020	3795.375	\$	95,653.02
2021	5148.167	\$	129,361.41
2022	755.75	\$	19,432.18

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Obetz. The City of Obetz reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Obetz indicated the following:

- Obetz has reduced the Flood Hazard Ranking from Medium to Low. This change is appropriate as the City's flood damage reduction regulations are stricter than required by OEPA; there are no structures in the 100 year floodplain; the City has a separate (not combined) storm sewer system; and flooding has never been an issue.

Table 9.27-14. Hazard Ranking Input

Hazard	Draft 2023 Ranking Based on RA Results
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperature	Medium
Flood	Low
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High

Hazard	Draft 2023 Ranking Based on RA Results
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.27-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Obetz

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	5	4
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	1	1
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Obetz identified the following vulnerabilities within its community:

- The City's police department (4175 Alum Creek Drive) does not have backup power. In the event of a power outage, the department cannot perform continuity of operations nor respond to emergencies.
- The City of Obetz has aging infrastructure that is vulnerable to hazard events, primarily the storm sewer system. This could also affect continuity of operations for numerous agencies and inhibit emergency responders from being able to help residents in a timely fashion.
- The City's residents are not knowledgeable about heatwaves and need to be educated on health information and preventative measures in order to stay safe.
- The City experiences unknown diseases and rapidly spreading diseases in populated areas of the City.
- The City has numerous mobile home locations that are particularly vulnerable to some hazard events and there are no known public storm shelters near Obetz.
- Obetz has numerous parks that do not have any warning systems when a severe storm is coming.
- The City struggles with snow and ice conditions and needs guidance on the removal and deployment of road clearing coordination.
- The City does not have a backup power source for traffic lights at key intersections which create issues during any power outage and presents issues regarding evacuation routes.
- The City experiences an increasing number of power outages and damaged power lines during hazard events.

- City Residents are not aware of community resources that are available to them, including preventative information, clinics, shelters, and emergency supplies.
- The City does not have enough native trees in newly developed areas. This leads to increased stormwater runoff/flooding and invasive species.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.27.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.27-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (1500 / 1 year)	City Administration and Mayor's office	No Progress	No	-	-
Purchase Tornado Sirens through the Franklin County Emergency Management & Homeland Security. (40,000 / 4 months)	City Administration and Mayor's office	Complete – the City used the general fund to complete; \$8370 spent on sirens and proportionate share in 2017.	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Obetz identified the following mitigation efforts completed since the last HMP:

- The City continues to monitor its storm sewer system and make repairs as needed.

Since the adoption of the County's first HMP, the City of Obetz has made significant mitigation progress in the following areas:

- The City continues to use the regulatory process to limit development in hazard areas.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Obetz participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.27-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	-	-	X	-	X	X
Disease Outbreak	X	X	-	X	-	X	X	-	-	X
Drought	X	X	-	X	-	X	X	-	-	X
Earthquake	X	X	-	X	X	X	X	-	-	X
Extreme Temperature	X	X	X	X	X	X	X	X	-	X
Flood	X	X	X	X	-	X	X	X	-	X
Geologic	X	X	-	X	-	X	X	-	-	X
Invasive Species	-	-	X	X	-	-	X	X	-	-
Severe Summer Weather	X	X	-	X	X	X	X	-	-	X
Severe Winter Weather	X	X	-	X	X	X	X	-	-	X
Tornado	X	X	-	X	X	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.27-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Obetz will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.27-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
001-Obetz-2023	Generator for City Police Department	Problem: The City's police department (4175 Alum Creek Drive) does not have backup power. In the event of a power outage, the department cannot perform continuity of operations nor respond to emergencies. Solution: The Department will purchase and install a generator at the police department to allow for continuity of operations during a power outage and allow the department to provide essential services to the community.	Dam/Levee, Drought, Earthquake, Extreme Temperature, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, and Tornado	6	Within 5 years	City Administration and Police Department	FEMA HMGP and BRIC	The Department will be able to perform continuity of operations.	\$50,000+	High	SIP	PP
002-Obetz-2023	Storm Sewer System Analysis	Problem: The City of Obetz has aging infrastructure that is vulnerable to hazard events, primarily the	Extreme Temperature, Flood, Severe Summer Weather, Severe	1	Medium Term	City Engineer and Utilities	Obetz General Fund	The City will experience reduced urban flooding and	\$25,000	Medium	LPR	PR



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		storm sewer system. This could also affect continuity of operations for numerous agencies and inhibit emergency responders from being able to help residents in a timely fashion. Solution: The City will conduct an engineer study to undertake an analysis of the City's aging infrastructure, including the storm sewer system to ensure it is functioning properly. Once the City identifies needed improvements, they will implement the most cost-effective solution.	Winter Weather, Tornado					will ensure that all infrastructure is up to code.				
003-Obetz-2023	Heatwave Awareness Campaign	Problem: The City's residents are not knowledgeable about heatwaves and need to be educated on health information and preventative measures in order to stay safe. Solution: The City will conduct a heatwave awareness campaign	Extreme Temperature, Drought	1	Ongoing	Community Services Director and PR Dept.	Obetz General Fund	The City will experience reduced health issues related to extreme temperatures	N/A	Medium	EAP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		to educate residents about the risks of extreme heat and provide information on preventative measures. Share information from other local and regional partners regarding available programs.										
004-Obetz-2023	Disease Outbreak Education	Problem: The City experiences unknown diseases and rapidly spreading diseases in populated areas of the City. Solution: The City will add links to City website for local health agencies such as Franklin County Public Health and Columbus Public Health in order to educate residents on disease outbreaks. The City will also provide links to locations of vaccination and testing clinics.	Disease Outbreak	1	Within 5 years	Community Services Director and PR Dept.	Obetz General Fund	The City residents will have a greater awareness of community resources.	N/A	Medium	EAP	PI
005-Obetz-2023	Community Storm Shelter Identification	Problem: The City has numerous mobile home locations that are particularly vulnerable to some	Dam Failure, Disease Outbreak, Drought Earthquake	1	Long Term	City Administration	Grants	Identification of storm shelters and community assets	\$15,000	Low	LPR	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		hazard events and there are no known public storm shelters near Obetz. Solution: The City will identify community storm shelters and will determine if existing government owned facilities could be retrofitted as a storm shelter or safe room.	Extreme Temperature, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes									
006-Obetz-2023	Lightning Detection System	Problem: Obetz has numerous parks that do not have any warning systems when a severe storm is coming. Solution: The City will seek funding for the installation of lightning detection systems in parks and install in parks when funding is available. The City will use the detection systems to notify the City of incoming storm systems.	Severe Summer Weather	1	Ongoing	Parks and Recreation	Grants	Improved safety for City and park users	\$50,000+	High	SIP	PP
007-Obetz-2023	Winter Weather Plan	Problem: The City struggles with snow and ice conditions and needs guidance on the removal and	Severe Winter Weather	1	Within 5 years	City Engineer and Street Dept.	Obetz General Fund	Improved severe winter weather response	\$10,000	Medium	LPR	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		deployment of road clearing coordination. Solution: The City will develop a comprehensive plan for snow and ice removal operations, including efficient deployment of snowplows, prioritization of road clearing, and coordination with other relevant agencies.										
008-Obetz-2023	Portable Generator	Problem: The City does not have a backup power source for traffic lights at key intersections which create issues during any power outage and presents issues regarding evacuation routes. Solution: The City will seek funding for backup generators for intersections utilized as evacuation routes.	Earthquake Extreme Temperature, Drought Flood Geologic Hazards, Severe Summer Weather Severe Winter Weather Tornado	6	Within 5 years	City Engineer	FEMA HMGP and BRIC	Continuity of operations	\$50,000+	High	SIP	PP
009-Obetz-2023	Power Line Burial	Problem: The City experiences an increasing number of power outages and damaged power lines during hazard events.	Severe Winter Weather; Tornadoes; Severe Summer Weather	3	Long Term	City Engineer	HMGP and Local Funds	Improved public safety and continuity of operations	Millions	High	SIP	PP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will look into burying electric utility lines by conducting a feasible study and implementing in locations that would be cost effective.										
010-Obetz-2023	Public Awareness Campaign	Problem: City Residents are not aware of community resources that are available to them, including preventative information, clinics, shelters, and emergency supplies. Solution: The City will undertake a public awareness campaign to promote Franklin County's mass notification system and other community resources available.	Dam/Levee, Disease Outbreak Drought Earthquake Extreme Temperature Flood Geologic Hazards, Invasive Species Severe Summer Weather Severe Winter Weather Tornado	6	Within 2 years	Community Services and PR Dept.	Local Funds	Improved community awareness of resources	N/A	High	EAP	PI
011-Obetz-2023	Urban Tree Canopy	Problem: The City does not have enough native trees in newly developed areas. This leads to increased stormwater runoff/flooding and invasive species. Solution: The City will plant more native trees to reduce	Geologic Hazards; Flooding, Invasive Species	2	Ongoing	Community Services Dept.	Grants and Local Funds	Reduced stormwater runoff and invasive species	\$500,000	High	NSP	NR



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		stormwater runoff and stabilize soil. The City will ensure trees being planted are ones that will enhance native populations and are treated to discourage invasive species.										

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.27-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
001-Obetz-2023	Generator for City Police Department	1	1	1	1	1	1	0	0	0	1	1	1	0	0	9	High
002-Obetz-2023	Storm Sewer System Analysis	0	1	1	1	0	0	0	1	0	1	0	0	0	1	6	Medium
003-Obetz-2023	Heatwave Awareness Campaign	1	0	1	0	0	0	0	1	1	1	0	1	0	0	6	Medium
004-Obetz-2023	Disease Outbreak Education	1	0	1	0	0	0	0	1	1	1	0	1	0	0	6	Medium
005-Obetz-2023	Community Storm Shelter Identification	1	0	0	1	0	0	0	0	1	1	1	0	0	0	5	Medium
006-Obetz-2023	Lightning Detection System	1	0	0	1	0	0	0	0	0	1	0	0	1	0	4	Low
007-Obetz-2023	Winter Weather Plan	1	1	1	1	0	0	0	0	0	1	0	1	0	1	7	Medium
008-Obetz-2023	Portable Generator	1	0	0	0	0	0	0	0	0	1	1	1	0	0	4	Low
009-Obetz-2023	Power Line Burial	1	1	0	1	0	1	0	0	1	1	1	0	1	0	8	Medium
0010-Obetz-2023	Public Awareness Campaign	1	1	1	0	0	0	0	0	1	1	1	1	1	0	8	Medium
0011-Obetz-2023	Urban Tree Canopy	0	1	0	0	0	0	0	1	1	1	1	0	1	1	7	Medium

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.28 TOWNSHIP OF PERRY

This section presents the jurisdictional annex for the Township of Perry that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Perry participated in the planning process, an assessment of the Township of Perry's risk and vulnerability, the different capabilities used in the Township of Perry, and an action plan that will be implemented to achieve a more resilient community.

9.28.1 Hazard Mitigation Planning Team

The Township of Perry identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Perry departments, including the Township Administrator. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.28-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Beth Beatty, Township Administrator	Name/Title:	Ian Warren, Road Superintendent
Address:	7125 Sawmill Road Dublin, OH 43016	Address:	7125 Sawmill Road Dublin, OH 43016
Phone Number:	614-889-2669	Phone Number:	614-889-8781
Email:	bbeatty@perrytwp.org	Email:	iwarren@perrytwp.org
NFIP Floodplain Administrator			
Name/Title:	Ian Warren, Road Superintendent		
Address:	7125 Sawmill Road Dublin, OH 43016		
Phone Number:	614-889-8781		
Email:	iwarren@perrytwp.org		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.28.2 Municipal Profile

The Township of Perry is in the southwest area of Franklin County. Today, the Township is composed of small "islands," which are surrounded by the city of Columbus, except for three: the farthest south "island", which borders Upper Arlington to the south; the largest "island" in the center of the original township, which borders Worthington to the east; and the most northerly "island", borders Delaware County to the north and Sharon Township to the east. Columbus Ohio is located roughly 12.5 miles away from the Township.

According to the American Community Survey, the 2021 population for the Township of Perry was 3,888, a 6.9 percent increase from the 2010 Census Population of 3,637. Data from the 2021 American Community Survey indicates that 7.5 percent of the population is 5 years of age or younger and 15.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.28.3 Jurisdictional Capability Assessment and Integration

The Township of Perry performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Perry to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Perry and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.28-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Building Code & Residential Code of Ohio	Franklin County	Economic Development and Planning
<i>How does this reduce risk?</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1, 2, and 3 family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to counties building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, Mechanical and Planning uses. The Residential code gives builders a pre identified checklist prior to construction leading to safer actions to accomplish goals.				
Zoning/Land Use Code	Yes	Zoning Resolution, 1982.	Local	Zoning
<i>How does this reduce risk?</i> Zoning codes have been enacted within Perry Township and are administered in order to provide orderly development and preserve the character of neighborhoods.				
Subdivision Ordinance	Yes	Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012	Franklin County	Authority for adopting is Franklin County Planning Commission. Administered by Economic Development & Planning Department
<i>How does this reduce risk?</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Ohio Administrative Code Rule 901:10-3-11 Storm Water Permits and individual	Franklin County	Ohio department of natural resources, division of soil and water conservation
<i>How does this reduce risk?</i> Shows best management practices for stormwaters and gives the steps for members to receive their permit requirements and construction requirements.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Perry to oversee and track development.

Table 9.28-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	-

Indicate if your jurisdiction implements the following	Yes/No	Comment:
If you do not issue development permits, what is your process for tracking new development?	N/A	Franklin County Economic Development and Planning issue and track permits.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	Yes	Floodplain
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Perry and their current responsibilities that contribute to hazard mitigation.

Table 9.28-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Zoning Commission is a resident composed board that hears proposals for amendments to the Zoning Resolution, development plans, and rezonings. The ZC decides whether or not to recommend proposed amendments to the Perry Township Board of Trustees.
Zoning Board of Adjustment	Yes	The Board of Zoning Appeals is resident composed board that hears, deliberates, and reaches decisions upon requests for variances and conditional uses. The BZA also hears zoning appeals made for any decision by Township in enforcing the Zoning Resolution.
Planning Department	No	Franklin County would assist the Township.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Perry Township Road Department is responsible for road maintenance, snow plowing, monitoring and maintaining the storm drainage systems, mosquito monitoring and treatment in the summer months, and leaf collection.
Construction/Building/Code Enforcement Department	Yes	In Perry Township the Township Zoning Inspector oversees all zoning activity and property maintenance. The Zoning Inspector handles all permits for residential and commercial properties. It is also the responsibility of the Zoning Inspector to ensure that the exterior property maintenance code is being followed.
Emergency Management/Public Safety Department	Yes	Perry Township Police Department Fire and emergency medical protection are provided through an agreement with the City of Worthington Division of Fire and the City of Upper Arlington Division of Fire.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Perry Township communicates with its residents via email through our E-Blast system. These address safety, road and emergency situations and community events that our residents need to be informed of quickly and/or timely.

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Perry Township Road Department cleans and maintains the township's storm sewer and ditches to minimize flood risk.
Mutual aid agreements	Yes	Fire and emergency medical protection are provided through an agreement with the City of Worthington Division of Fire and the City of Upper Arlington Division of Fire.
Human Resources Manual	Yes	The road superintendent's job description includes identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	Yes	The Civilian Advisory Committee provides resident input, perspectives, and recommendations to the Board of Trustees concerning matters pertinent to Perry Township.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	Currently in the process of looking for a grant writer. Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	The township would seek help from the Franklin County Drainage Engineer.
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Township of Perry.

Table 9.28-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Perry.

Table 9.28-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Perry Township communicates with its residents via email thru our E-Blast system.
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Stormwater information is available on the municipal website.
Social media for hazard mitigation education and outreach	Yes	Perry Township Facebook is used for outreach and education.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	The Civilian Advisory Committee provides resident input, perspectives, and recommendations to the Board of Trustees concerning matters pertinent to Perry Township.
Warning systems for hazard events	Yes	Perry Township communicates with its residents via email thru our E-Blast system. These address safety, road and emergency situations and community events that our residents need to be informed of quickly and/or timely.
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	The Quarterly Newsletter is quarterly publication for Perry Township residents. The Newsletter provides residents with Perry Township news, events, information, and more.

Community Classifications

The table below summarizes classifications for community programs available to the Township of Perry.

Table 9.28-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future

hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.28-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.28.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Perry.

Table 9.28-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Perry (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Perry.

Table 9.28-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No areas and the Township does not maintain a list.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	Franklin County does this
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Franklin County does this
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County does this
Are any certified floodplain managers on staff in your jurisdiction?	Franklin County does this
Do you have access to resources to determine possible future flooding conditions from climate change?	Franklin County does this
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No, Franklin County handles this
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County does this
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County does this
What are the barriers to running an effective NFIP program in the community, if any?	None, Franklin County does this
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Franklin County Special Resolution NFIP Regulation, original adoption September 26, 1978, amended and readopted September 19, 2007
Does your floodplain management program meet or exceed minimum requirements?	Meets

NFIP Topic	Comments
<ul style="list-style-type: none"> If exceeds, in what ways? 	
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.28.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.28-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	Franklin County Issues Permits									
Multi-Family										
Other (commercial, mixed-use, etc.)										
Total Permits Issued										

Table 9.28-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.28.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Perry's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be



identified clearly using mapping techniques and technologies and for which the Township of Perry has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.28-1. Township of Perry Hazard Area Extent and Location Map- Flood

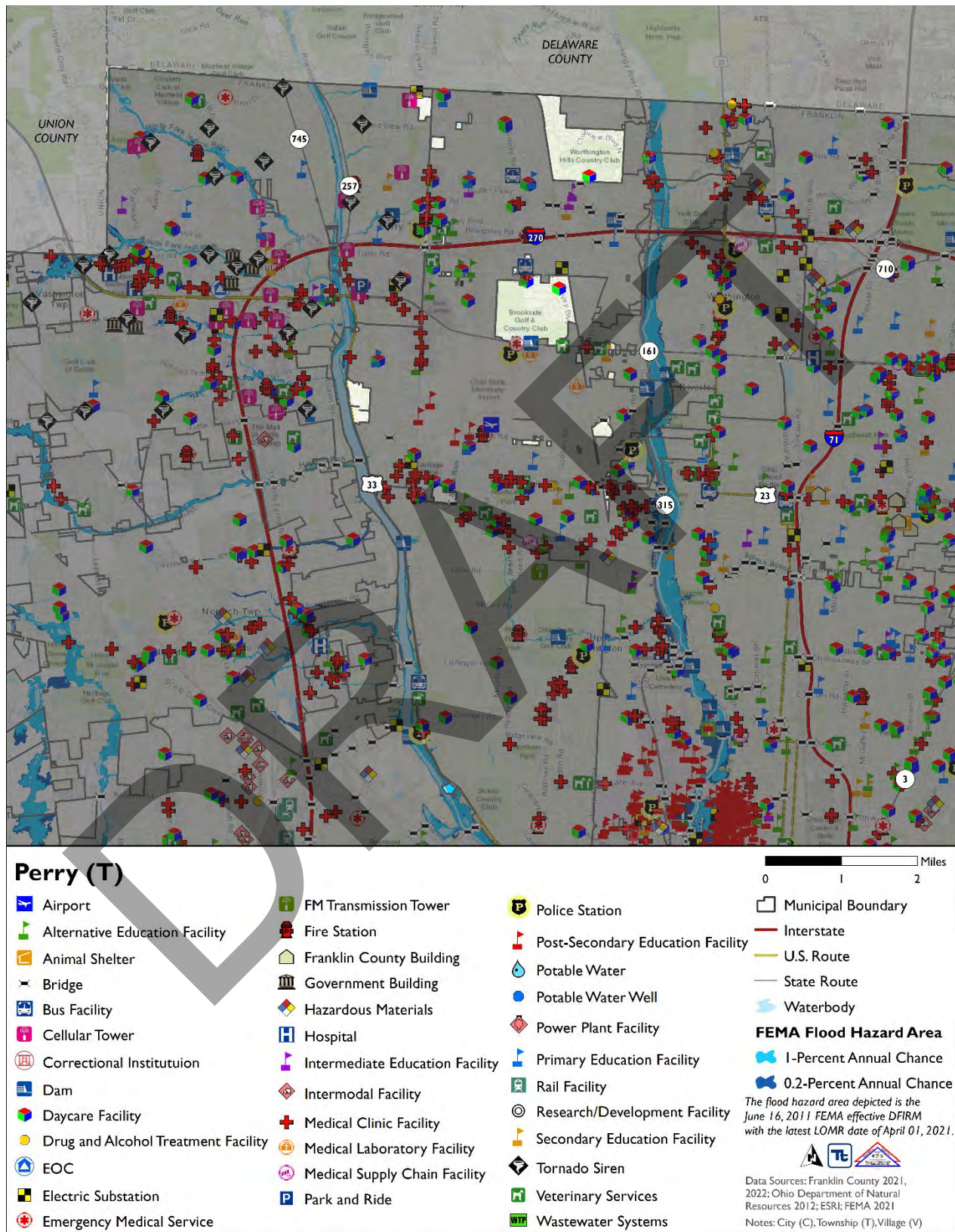


Figure 9.28-2. Township of Perry Hazard Area Extent and Location Map-Inland Erosion

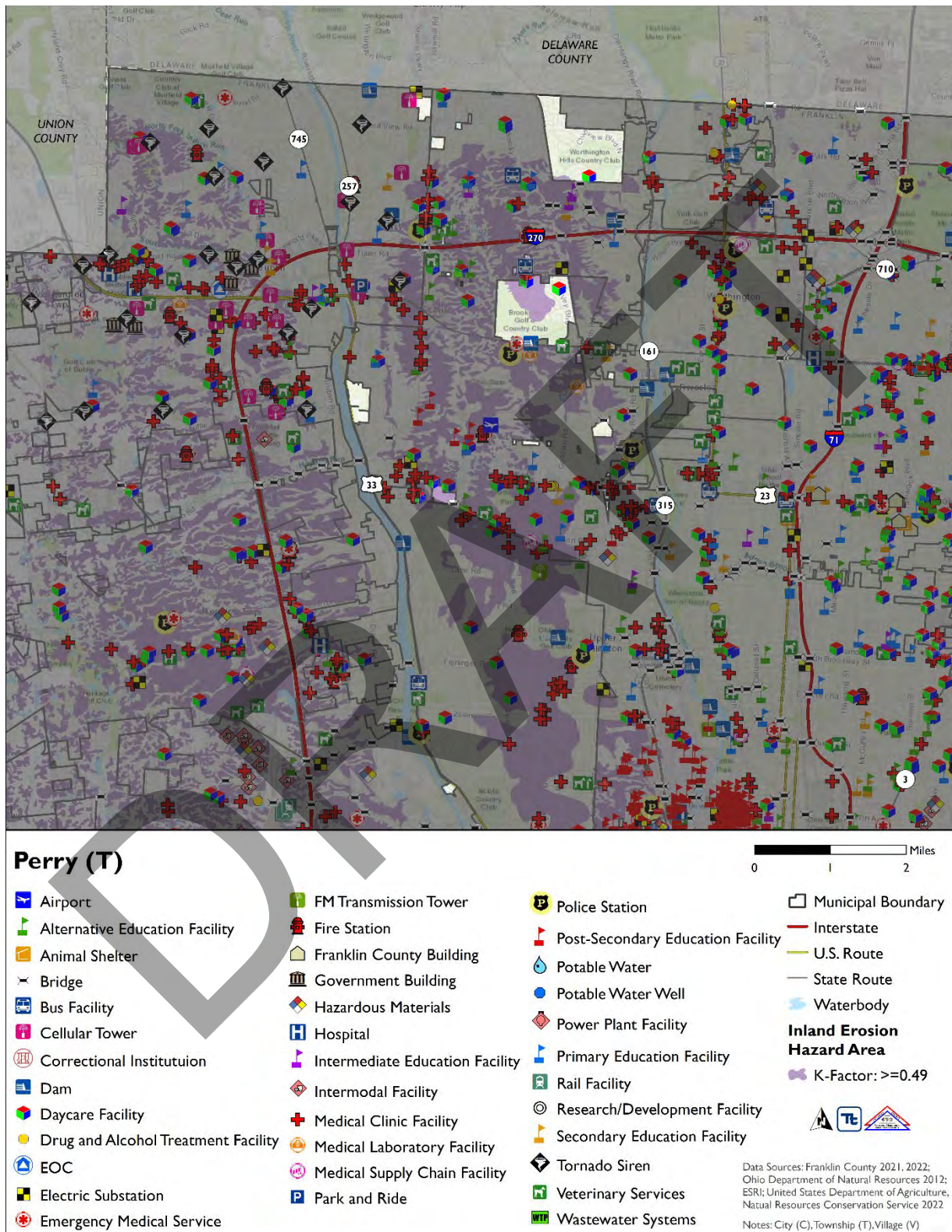
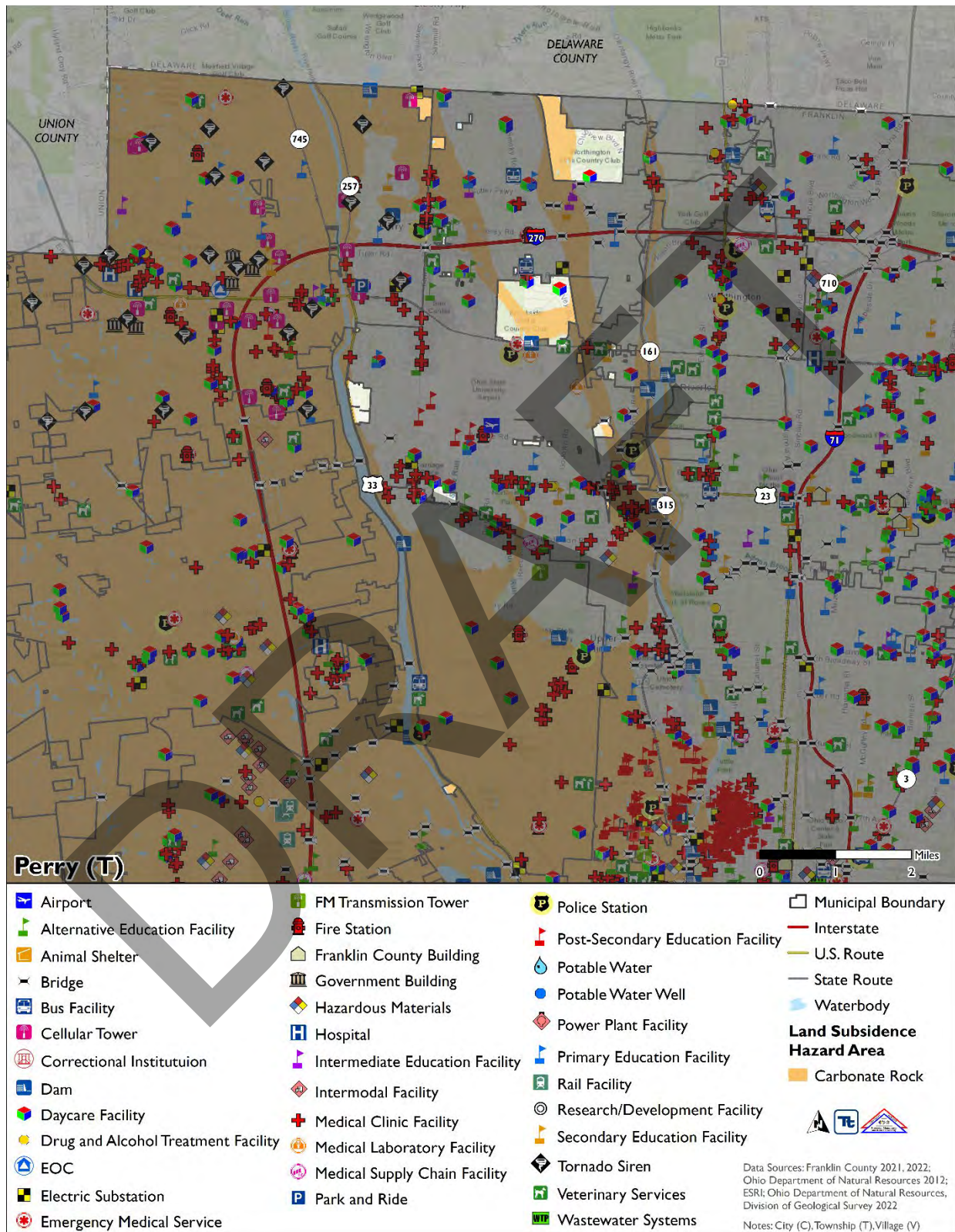


Figure 9.28-3. Township of Perry Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Perry Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Perry Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.28-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not incur additional damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not incur additional damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not incur additional damages.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Perry.

The Township of Perry reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.28-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Medium
Geologic (Erosion)	Low
Geologic (Land Subsidence)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.28-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Perry Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	3	3
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Perry Township identified the following vulnerabilities within its community:

- The Township experiences power outages during hazard events due to trees knocking down powerlines, stopping power.
- The Township experiences routine power outages due to aging infrastructure and untrimmed trees.
- Storm Sewers in Worthington Hills along Candlewood Drive and Clubview Blvd South have a couple storm sewer pipes that have reached full capacity in heavy rains and caused storm water to threaten residential homes in the area.



- The Township residents have limited knowledge of the hazards of concern and do not know how to implement proper mitigation measures to their own properties.
- The Township does not have a Comprehensive Plan developed that integrates the hazards of concern from the HMP.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

DRAFT



9.28.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.28-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Replace existing culvert and reinforce existing stonewall along dam discharge area.	Franklin County Engineer	Completed	No	-	-
Seek funding for public information including outreach projects and technical assistance to property owners. (5,000 / 1 year)	Township Trustees Office	Completed	No	-	-
Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (2,500 / 1 year)	Township Trustees Office	Ongoing	Yes	Lack of public knowledge	Police Department, Police Chief

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Perry identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Township of Perry has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Perry participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.28-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	X	-	X	-	-	-
Disease Outbreak	X	-	-	X	X	-	X	-	-	-
Drought	X	-	-	X	X	-	X	-	-	-
Earthquake	X	X	-	X	X	-	X	-	X	-
Extreme Temp	X	-	-	X	X	-	X	-	-	-
Flood	X	X	-	X	X	-	X	-	X	-
Geologic (Erosion)	X	X	-	X	X	-	X	-	X	-
Geologic (Land Subsidence)	X	-	-	X	X	-	X	-	-	-
Invasive Species	X	X	-	X	X	-	X	-	X	-
Severe Summer Weather	X	X	-	X	X	-	X	-	X	-
Severe Winter Weather	X	X	-	X	X	-	X	-	X	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.28-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Perry Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.28-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Perry Township-001	Routine Tree and Bush Maintenance	<p>Problem: The Township experiences power outages during hazard events due to trees knocking down powerlines, stopping power.</p> <p>Solution: The Township will implement a routine monthly tree maintenance program to remove dead trees and trim overgrown trees to reduce power outages.</p>	Earthquake, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	6	Ongoing	Administration, Public Works	HMGP, Township Budget	The Township should experience reduced power outages.	\$20,000/year	High	LPR	PR
2023-Perry Township-002	Electrical infrastructure inventory	<p>Problem: The Township experiences routine power outages due to aging AEP infrastructure and untrimmed trees.</p> <p>Solution: The Township will</p>	Earthquake, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado	6	3 Years	Administration, Public Works, AEP	Township Budget	The Township should experience reduced power outages.	<\$5,000 for the Study	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		conduct an electrical infrastructure inventory with AEP to evaluate what infrastructure needs to be upgraded or replaced to reduce power outages. AEP will then implement the most cost effective way of upgrading aging infrastructure.										
2023-Perry Township-003	Worthington Hills Storm Sewer	<p>Problem: Storm Sewers in Worthington Hills along Candlewood Drive and Clubview Blvd South have a couple storm sewer pipes that have reached full capacity in heavy rains and caused storm water to threaten residential homes in the area.</p> <p>Solution: The initial analysis of the storm sewer and storm events, showed that two storms were near 50-year storm</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	Administration, Public Works	FMA, BRIC, HMGP, CDBG, Township Budget	The Township should experience less flooding.	>\$300,000	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		events and put the sewer pipes at full capacity. The Townships will conduct a study to evaluate the options to add additional piping or retention to the areas. The Township will then implement the most cost-effective project.										
2023-Perry Township-004	Public Outreach/ Mitigation Information	<p>Problem: The Township residents have limited knowledge of the hazards of concern and do not know how to implement proper mitigation measures to their own properties.</p> <p>Solution: The Township will conduct monthly mitigation workshops to focus on the hazards of concern and provide suggestions on how property owners can</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	1	Ongoing	Township Administration, Public Works	HMGP, Township Budget	The Residents in the Township become more knowledgeable	\$2,500/year	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		mitigate their own homes.										
2023-Perry Township-005	Develop a Comprehensive Plan	<p>Problem: The Township does not have a Comprehensive Plan developed that integrates the hazards of concern from the HMP.</p> <p>Solution: The Township will develop a Comprehensive Plan and integrate information relating to the hazards of concern.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	1	2 years	Township Administration	HMGP, Township Budget	The Township will have guided development relating to hazard areas.	Staff Time	High	LPR	PR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.



- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.28-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Perry Township-001	Routine Tree and Bush Maintenance	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-Perry Township-002	Electrical infrastructure inventory	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-Perry Township-003	Worthington Hills Storm Sewer	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Perry Township-004	Public Outreach/ Mitigation Information	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Perry Township-005	Develop a Comprehensive Plan	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

DRAFT

SECTION 9. JURISDICTIONAL ANNEX

9.29 TOWNSHIP OF PLAIN

This section presents the jurisdictional annex for the Township of Plain that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Plain participated in the planning process, an assessment of the Township of Plain's risk and vulnerability, the different capabilities used in the Township of Plain, and an action plan that will be implemented to achieve a more resilient community.

9.29.1 Hazard Mitigation Planning Team

The Township of Plain identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Plain departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.29-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Ben Collins, Township Administrator	Name/Title:	Mary Fee, Administrative Coordinator
Address:	PO Box 273, New Albany, OH 43054	Address:	PO Box 273, New Albany, OH 43054
Phone Number:	614-855-2085	Phone Number:	614-855-2085
Email:	bcollins@plaintownship.org	Email:	mfee@plaintownship.org
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Franklin County Planning Administrator		
Address:	150 South Front Street, FSL Suite 10, Columbus OH 43215		
Phone Number:	614-525-5244		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.29.2 Municipal Profile

The Township of Plain is located in the northeastern corner of Franklin County and is bordered by Blendon Township to the west, Jefferson Township to the south and Mifflin Township to the southwest. Plain Township is located roughly 8.5 miles from Columbus Ohio. The northern part of Plain Township is situated in the headwaters of the Rocky Fork Creek, a tributary of the Big Walnut Creek. From north to south, the Fancher Run, Schleppi Run, Bevelheimer Run, and Sugar Run of the Rocky Fork Creek wind through Plain. Blacklick Creek runs from the northeast part of Plain, south through New Albany, and on to the southeast section of the Township.

According to the American Community Survey, the 2021 population for the Township of Plain was 12,469, a 26.86 percent increase from the 2010 Census population of 9,826. Data from the 2020 U.S. Census indicate that 5.8 percent of the population is 5 years of age or younger and 10.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.29.3 Jurisdictional Capability Assessment and Integration

The Township of Plain performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Plain to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Plain and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.29-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Updated March 6, 2020	Local	Township Administrator
<i>How does this reduce risk?</i> The Township reviews the FEMA Flood Map for proposed construction near waterways. The zoning resolution discourages development in floodways, floodplains, and wetlands. The zoning resolution requires developers to mitigate wetland disturbance. The zoning resolution has a density limit of 1 unit per 2.5 acres, which helps reduce the risk to flooding.				
Subdivision Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Land Use Plan 2012 Update	Local	
<i>How does this reduce risk?</i> The Land Use Plan promotes orderly development that limits impact to creeks and streams and identifies flood zones. The Land Use Plan discourages development within natural hazard areas.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Plain to oversee and track development.

Table 9.29-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Zoning department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	SFHA
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	Substantial. Metro Parks owns >1,000 acres and there is limited developable land remaining.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Plain and their current responsibilities that contribute to hazard mitigation.

Table 9.29-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Zoning Commission
Zoning Board of Adjustment	Yes	Board of Zoning Appeals
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Road Maintenance
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	Fire Department
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Plain Township provides warning signals covering the entire Township. ALERT Franklin County.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Road Maintenance
Mutual aid agreements	Yes	Fire & EMS
Human Resources Manual	Yes	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-
Engineers or professionals trained in building or infrastructure construction practices	No	The Township relies on County engineering.
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	Yes	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Township of Plain.

Table 9.29-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Plain.

Table 9.29-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Township newsletter, CodeRed and County emergency communication system
Personnel skilled or trained in website development	Yes	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook, Twitter, YouTube
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Sirens, CodeRed and County emergency communication
Natural disaster/safety programs in place for schools	N/A	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Township of Plain.

Table 9.29-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	2	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.29-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.29.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Plain.

Table 9.29-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Plain (Twp)	0	1	\$279.00	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported
RL Repetitive Loss
SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Plain.

Table 9.29-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	There are over 150 properties abutting a creek or stream in unincorporated Plain Township.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	Yes
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No. The Township has homes with flood hazard risk attributable to stormwater systems, i.e. ditches
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure
What are the barriers to running an effective NFIP program in the community, if any?	N/A

NFIP Topic	Comments
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.29.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.29-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	2	0	4	0	2	0	2	0	3	0
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	2	0	4	0	2	0	2	0	3	0

Table 9.29-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None anticipated					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.29.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Plain's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Plain has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.29-1. Township of Plain Hazard Area Extent and Location Map – Flood

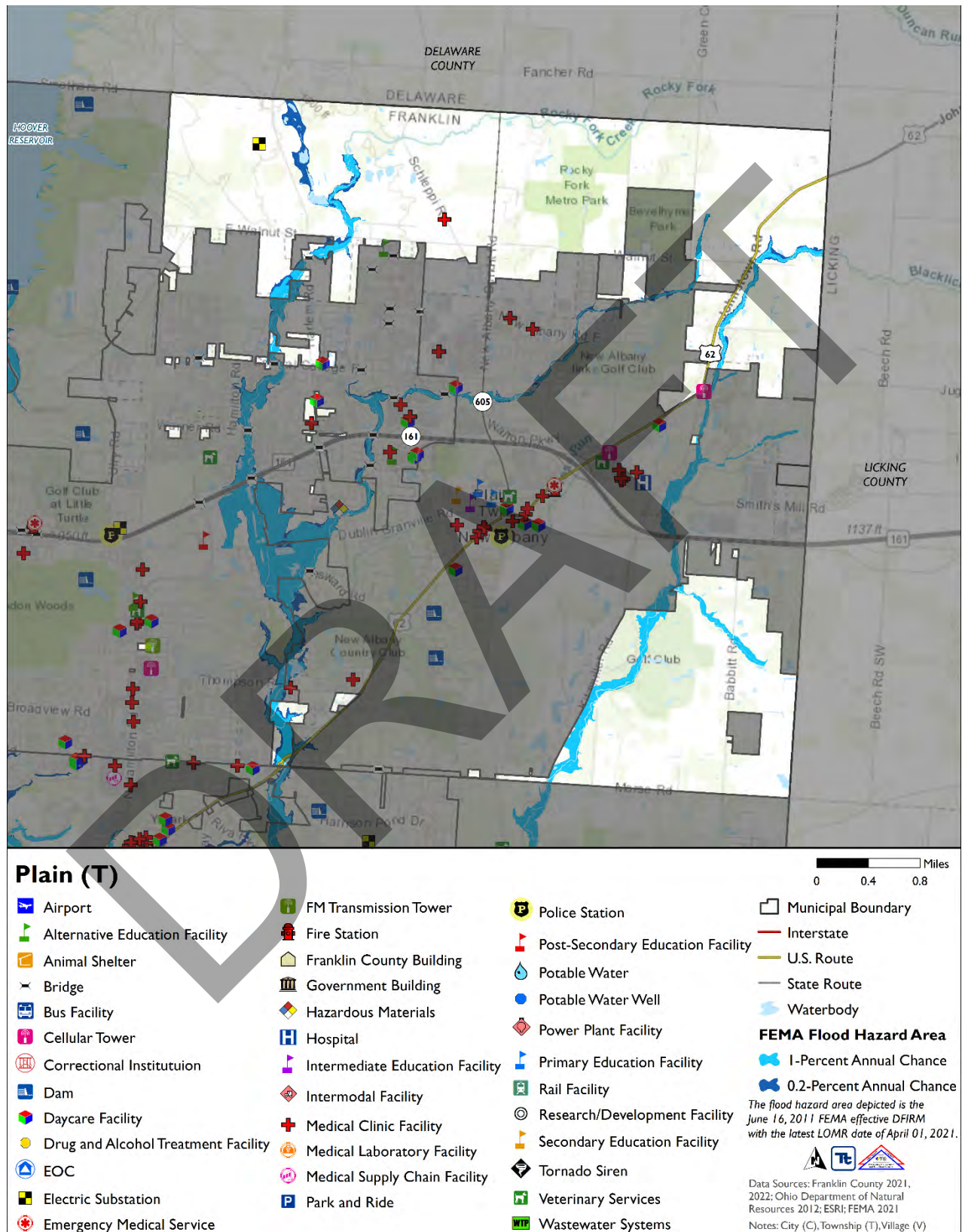


Figure 9.29-2. Township of Plain Hazard Area Extent and Location Map – Land Subsidence

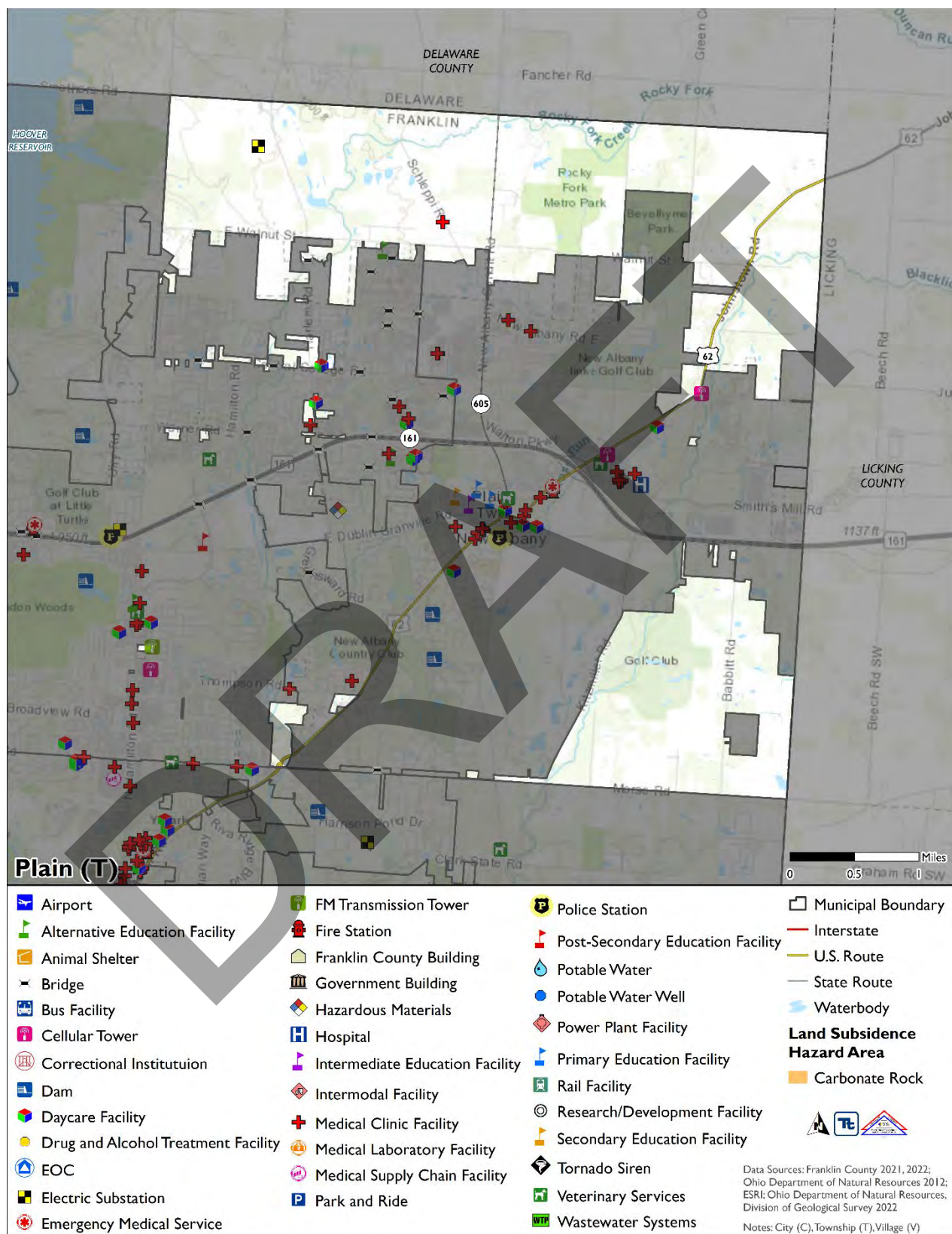
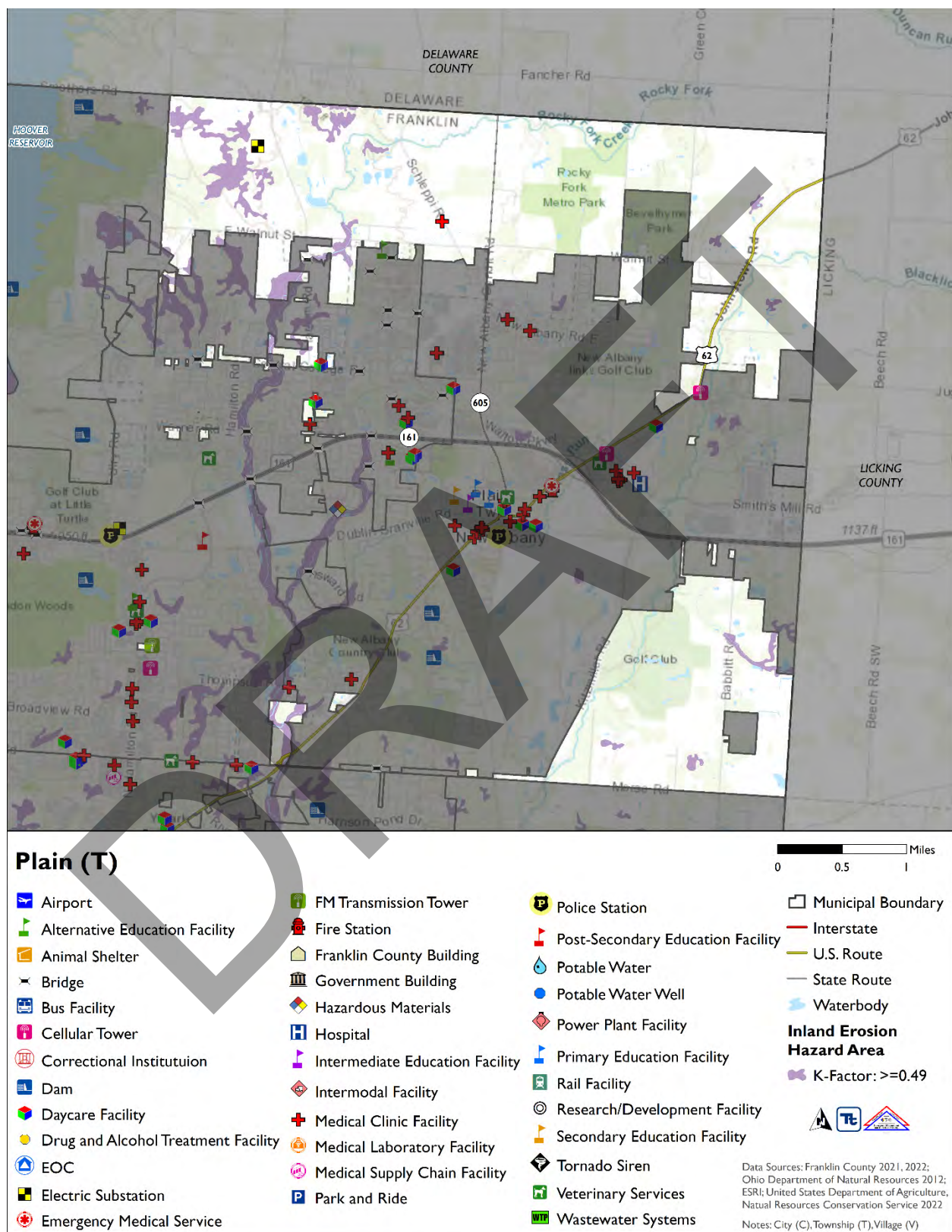


Figure 9.29-3. Township of Plain Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Plain Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Plain Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.29-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	Although the County was impacted, the Township did not report significant damages.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Although the County was impacted, the Township did not report significant damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Although the County was impacted, the Township did not report significant damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township was subject to closures and masking/social distancing requirements.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Plain. The Township of Plain reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.29-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temperatures	Low
Flood	Medium
Geologic (Erosion)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.29-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Plain Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Plain Township identified the following vulnerabilities within its community:

- There are properties in the Township located in the floodplain.
- Stormwater systems are inadequate and contribute the flood risk within the Township.
- Residents are not well-informed about the hazards in the Township.
- The Township does not have access to resources to determine possible future flooding conditions from climate change.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.29.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.29-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Drainage improvement: Clouse Road stormwater system is inadequate, needs to be replaced (ditches, culvert, and tile), residents report basement flooding.	Township Trustee's office	No Progress	Yes	Minor flooding to basements, erosion of driveways, limits emergency access to homes.	Township Administrator
Roadway flooding: Bevelhymer Road south of Walnut Street and north of Sugar Run frequently floods during rain events. Roadside culvert/drainage needs improvement/restoration.	Township Trustee's office	Complete	-	-	-
Road drainage improvement: Bevelhymer Road south of Sugar Run	Township Trustee's office	Complete	-	-	-
Seek funding for public information including outreach projects and technical assistance to property owners. Educate the population about flood hazard risks. (1,000 / 1 year	Township Trustee's office	No Progress	Yes	Public education on hazards and support for private mitigation projects is needed	Township Administrator
Mitigate flooding issues for two properties on Johnstown Rd. Creekside property floods. Floodwall to protect existing homes.	Township Trustee's office	No Progress	Yes	10818 and 10842 Johnstown Road. Homes are within the floodplain.	Township Administrator

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Plain identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Township of Plain has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Plain participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.29-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	-	-	-	X	-	X	X	-	-	-
Disease Outbreak	-	-	-	X	-	X	X	-	-	-
Drought	-	-	-	X	-	X	X	-	-	-
Earthquake	-	-	-	X	-	X	X	-	-	-
Extreme Temperatures	-	-	-	X	-	X	X	-	-	-
Flood	-	X	-	X	-	X	X	-	X	-
Geologic (Erosion)	-	-	-	X	-	X	X	-	-	-
Invasive Species	-	-	-	X	-	X	X	-	-	-
Severe Summer Weather	-	-	-	X	-	X	X	-	-	-
Severe Winter Weather	-	-	-	X	-	X	X	-	-	-
Tornadoes	-	-	-	X	-	X	X	-	-	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.29-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Plain Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.29-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Township of Plain-001	Clouse Road Drainage Improvement	Minor flooding to basements, erosion of driveways, limits emergency access to homes. Clouse Road stormwater system is inadequate, needs to be replaced (ditches, culvert, and tile), residents report basement flooding.	Flood	6	5 years	Township Administrator	BRIC, HMGP	High	High	High	SIP	SP
2023-Township of Plain-002	All-Hazards Education Campaign	Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. Work with Franklin County EM&HS to provide residents with the necessary information to protect themselves and understand the threats of all hazards.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS and Plain Township Administrator	HMGP	High	Low	Medium	EAP	PI
2023-Township of Plain-003	Johnstown Road Floodwall	10818 and 10842 Johnstown Road are within the floodplain. Mitigate flooding issues for the two properties on Johnstown Rd. by constructing a floodwall.	Flood	6	5 years	Township Administrator	HMGP, Ohio Public Works Commission	High	High	High	SIP	SP



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Township of Plain-004	Residential Technical Assistance for Mitigation Projects	Residents are not well-informed of support availability for mitigation projects. Seek funding for educations and technical assistance to property owners regarding various mitigation programs	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS and Plain Township Administrator	HMGP	Medium	Low	Medium	EAP	PI, PP

*Mitigation initiative is related to a critical facility and/or community lifeline
Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:



- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.29-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Township of Plain-001	Clouse Road Drainage Improvement	1	1	1	1	1	1	0	1	0	1	0	1	1	0	10	High
2023-Township of Plain-002	All-Hazards Education Campaign	1	0	1	1	1	1	0	0	0	1	1	1	0	0	8	Medium
2023-Township of Plain-003	Johnstown Road Floodwall	1	1	1	1	1	1	0	1	0	1	0	1	1	0	10	High
2023-Township of Plain-004	Residential Technical Assistance for Mitigation Projects	0	0	1	1	1	1	0	0	0	1	1	1	0	0	7	Medium

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.30 Pleasant Township

This section presents the jurisdictional annex for the Pleasant Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Pleasant Township participated in the planning process, an assessment of the Pleasant Township's risk and vulnerability, the different capabilities used in the Pleasant Township, and an action plan that will be implemented to achieve a more resilient community.

9.30.1 Hazard Mitigation Planning Team

The Pleasant Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Pleasant Township departments, including Department of Emergency Services. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.30-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Dan Whiting/Fire Chief	Name/Title:	Paula Wilkins/Fiscal Officer
Address:	5373 Norton Road, Grove City, Ohio 43123	Address:	5373 Norton Road, Grove City, Ohio 43123
Phone Number:	614-877-4375	Phone Number:	614-877-4375
Email:	dwhiting@pleasanttownship.com	Email:	pwilkins@pleasanttownship.com
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		

Method of Participation:	
--------------------------	--

9.30.2 Municipal Profile

Pleasant Township is in the southwest corner of Franklin County. Parts of two municipalities are located in Pleasant Township: the city of Columbus, in the northeast; and the village of Harrisburg, in the south. The unincorporated communities of Darbydale and Georgesville lie in the township's south and west.

According to the American Community Survey, the 2021 population for the Township was 6,768, a 1.45 percent increase from the 2010 Census population of 6,671. Data from the 2021 American Community Survey indicates that 3.3 percent of the population is 5 years of age or younger and 20.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.30.3 Jurisdictional Capability Assessment and Integration

The Pleasant Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Pleasant Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Pleasant Township and provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.30-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	No	-	-	-
<i>How does this reduce risk?</i>				
Zoning/Land Use Code	No	-	-	-
<i>How does this reduce risk?</i>				
Subdivision Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Floodplain Management or Watershed Plan <i>How does this reduce risk?</i>	No	-	-	-
Stormwater Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Open Space Plan <i>How does this reduce risk?</i>	No	-	-	-
Urban Water Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Habitat Conservation Plan <i>How does this reduce risk?</i>	No	-	-	-
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of the Pleasant Township to oversee and track development.

Table 9.30-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	-
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Pleasant Township and their current responsibilities that contribute to hazard mitigation.

Table 9.30-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	Pleasant Township Fire Department is responsible for emergency management within the Township.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	The Township has a tornado siren.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Professionals are limited and utilized for emergency response.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Pleasant Township.

Table 9.30-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Pleasant Township.

Table 9.30-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Township Fire Department
Personnel skilled or trained in website development	Yes	Township utilizes an outside contractor
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Limited, Website
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	The Township has a tornado siren
Natural disaster/safety programs in place for schools	Yes	The school has an emergency plan
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Limited, Facebook

Community Classifications

The table below summarizes classifications for community programs available to the Pleasant Township.

Table 9.30-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	4/4Y	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for

each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.30-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic (Erosion)	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Strong
Tornado	Moderate

9.30.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Pleasant Township.

Table 9.30-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Pleasant (Twp)	NR	NR	NR	NR	NR

Sources: a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Pleasant Township.

Table 9.30-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Darby Creek is an area prone to flooding. The Township does not maintain a list of properties damaged by flooding.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	There are no properties under the Townships jurisdiction.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No
NFIP Compliance	
What local department is responsible for floodplain management?	The Township is not responsible for floodplain management.
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	N/A
What are the barriers to running an effective NFIP program in the community, if any?	The Township lacks the resources for an effective NFIP program.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	N/A

NFIP Topic	Comments
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	N/A
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	N/A
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.30.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.30-11. Number of Building Permits for New Construction Since Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	The Township did not report any new permits for construction.									
Multi-Family										
Other (commercial, mixed-use, etc.)										
Total Permits Issued										

Table 9.30-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
The Township does not have plans for development and does not handle permits.					
Known or Anticipated Major Development in the Next Five (5) Years					
The Township does not have plans for development and does not handle permits.					

9.30.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Pleasant Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which the Pleasant Township has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.30-1. Pleasant Township Hazard Area Extent and Location Map-Flood

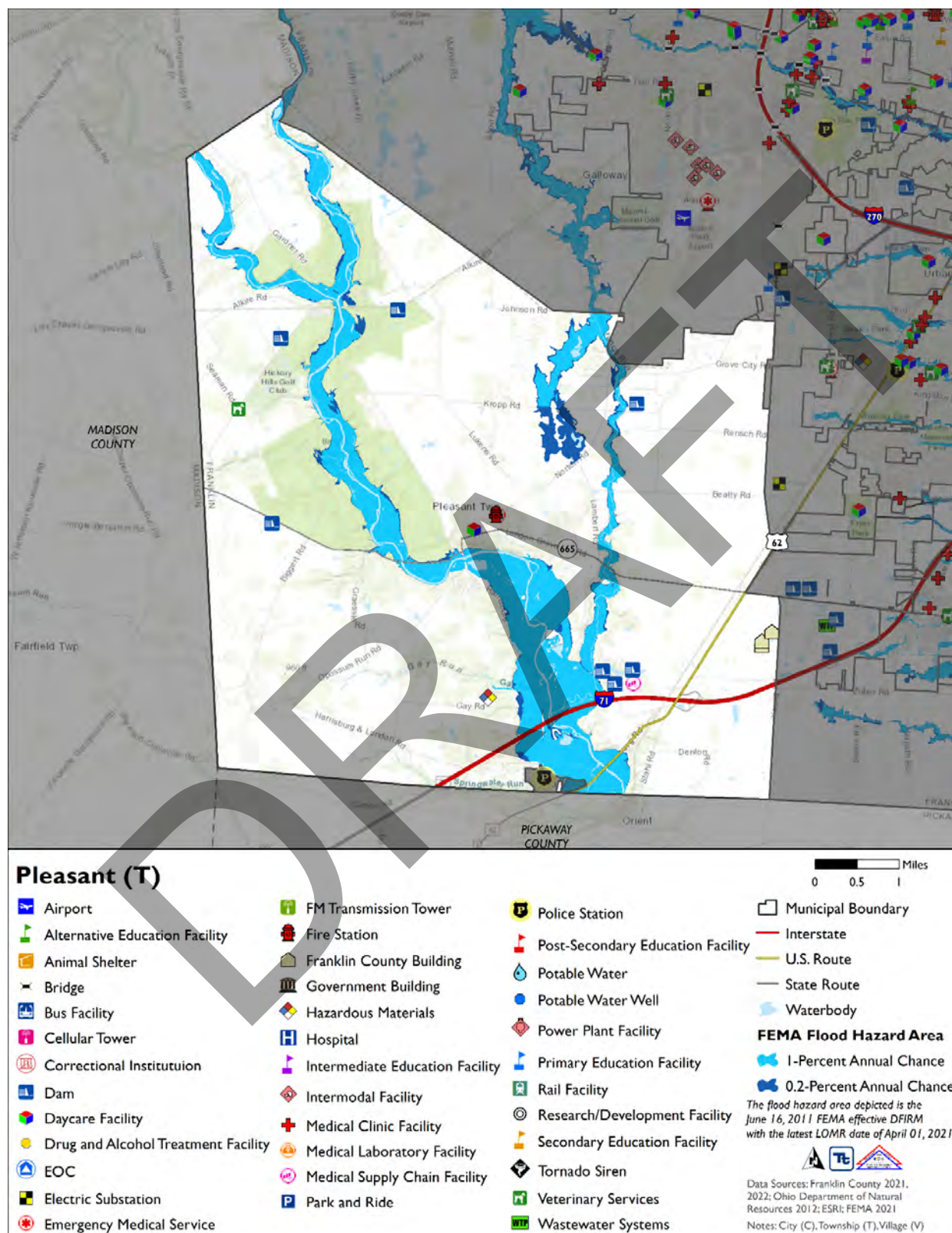


Figure 9.30-2. Pleasant Township Hazard Area Extent and Location Map-Inland Erosion

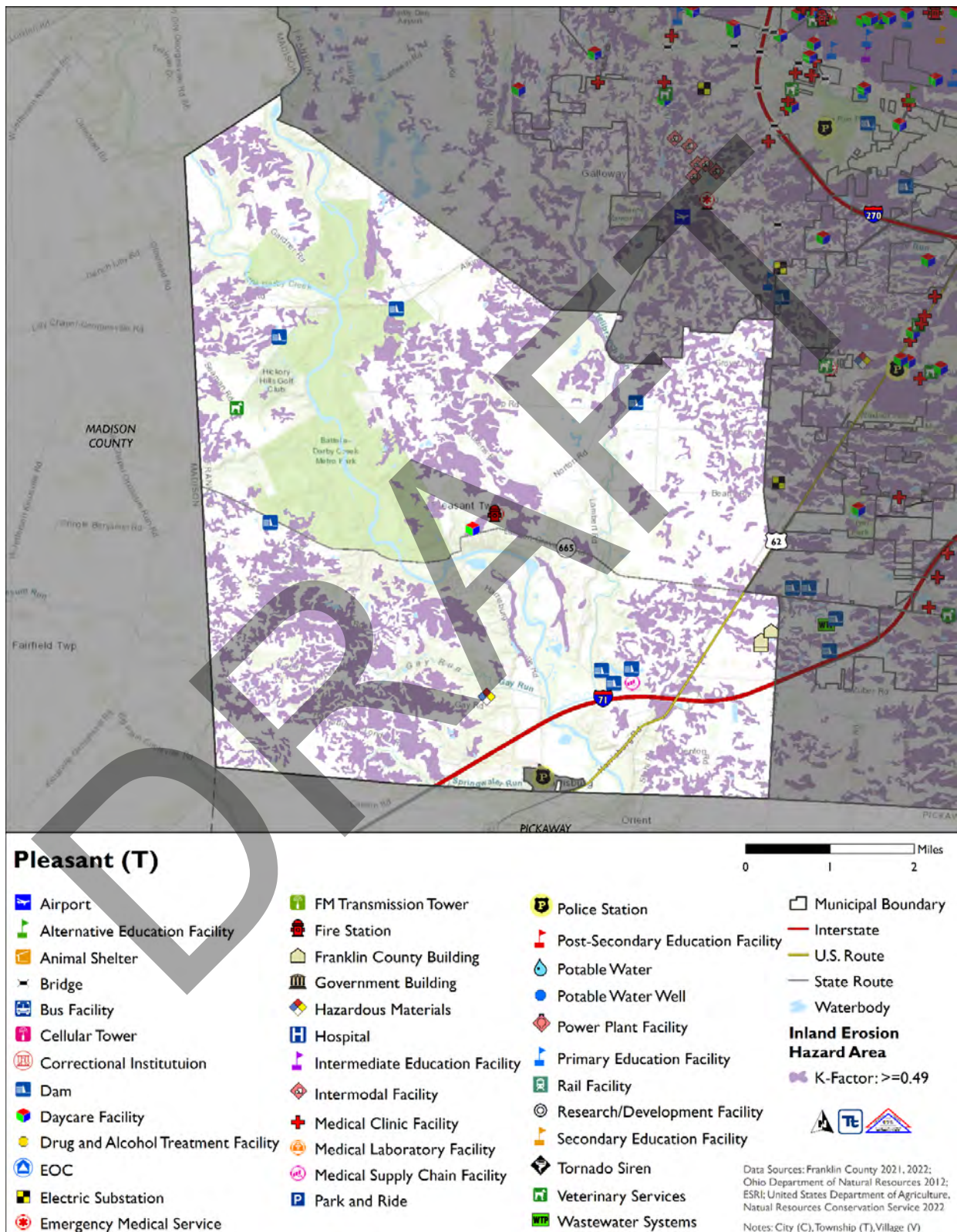


Figure 9.30-3. Pleasant Township Hazard Area Extent and Location Map-Land Subsidence

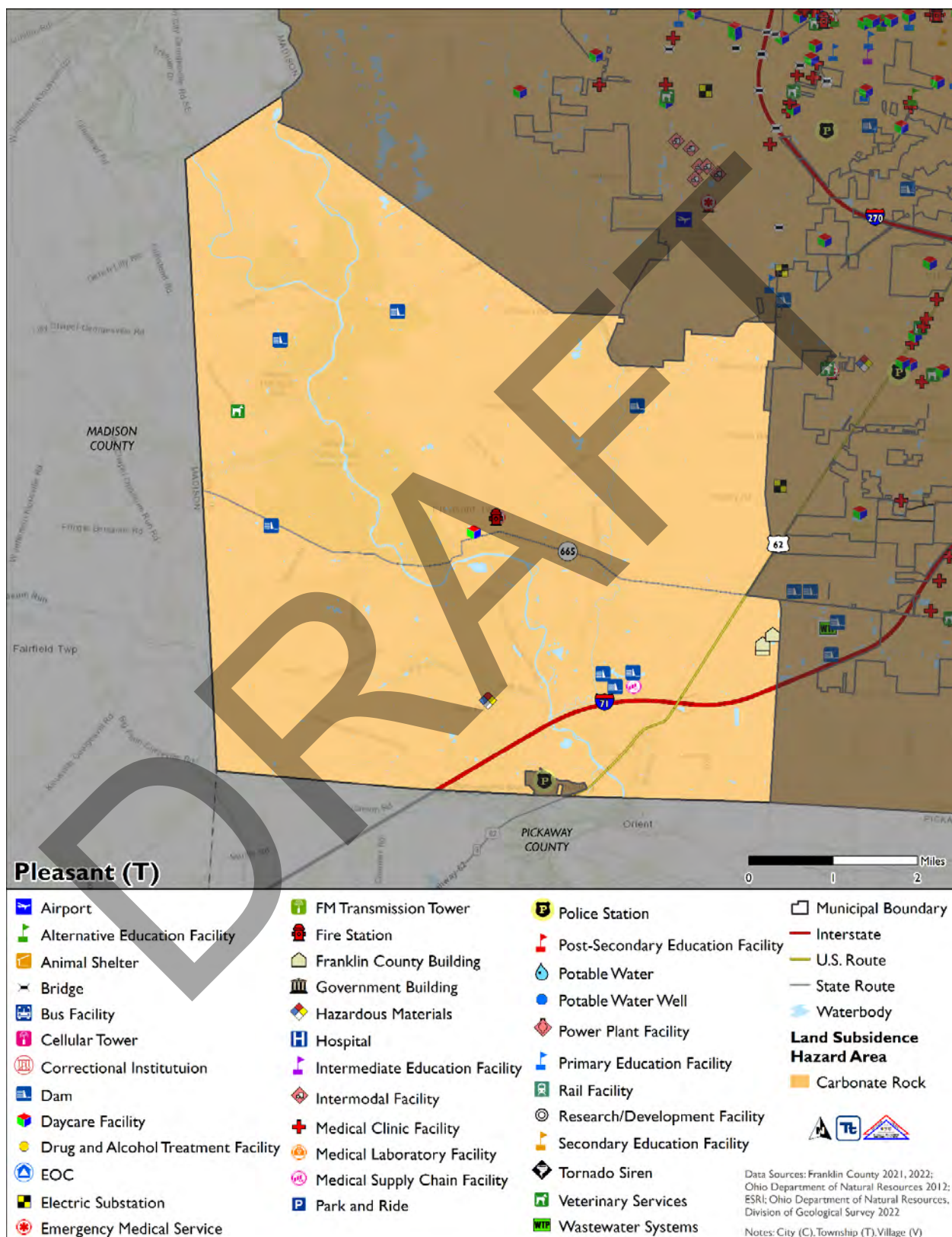
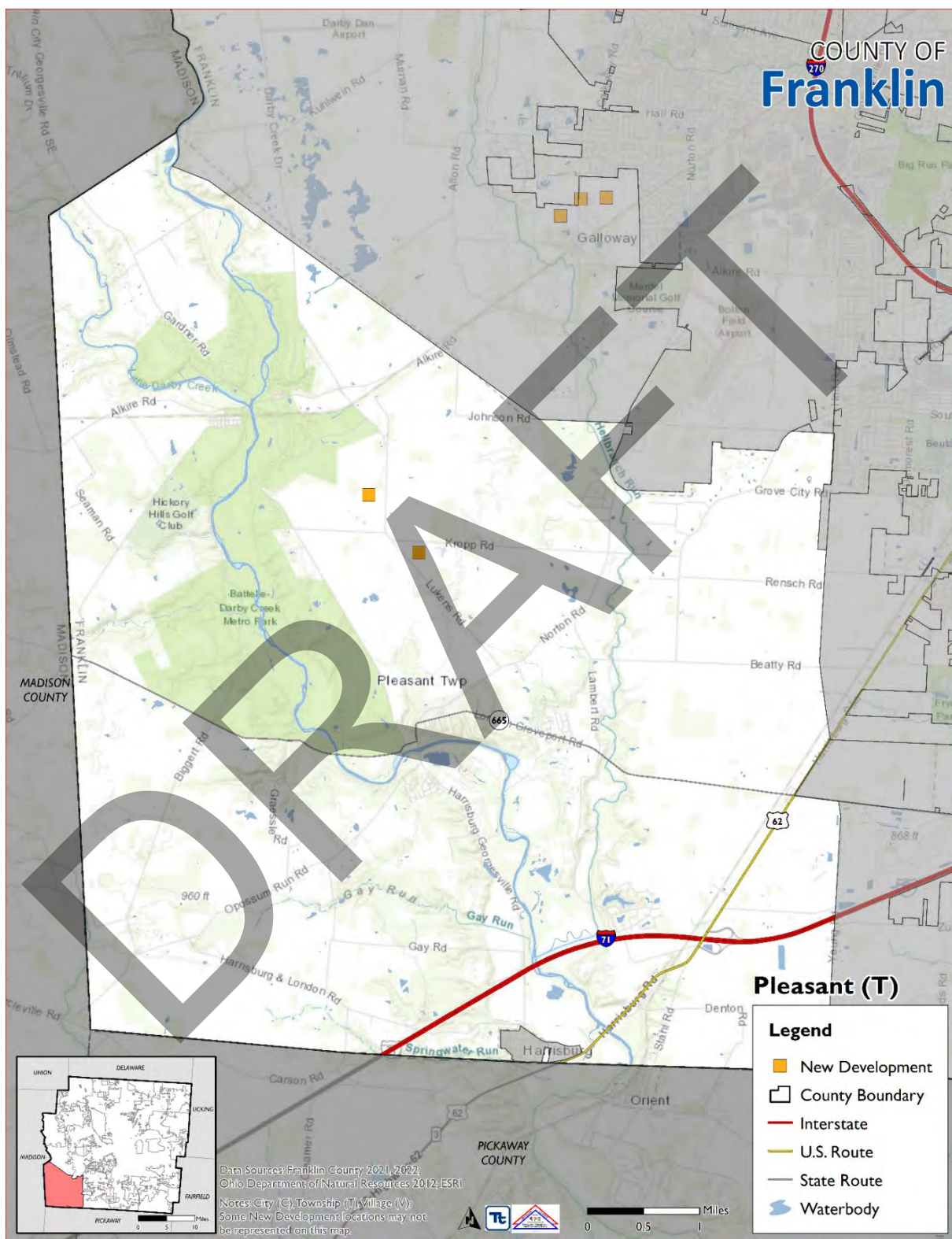


Figure 9.30-4. Pleasant Township New Development Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Pleasant Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Pleasant Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.30-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Pleasant Township.

Pleasant Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.30-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic (Erosion)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.30-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Pleasant Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	3	2
Subsidence (Karst/Carbonate Rock) Hazard Area	20	19
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1 Identified Issues

In addition to the risk assessment, Pleasant Township identified the following vulnerabilities within its community:

- Residents at Zuber Road experience property loss during flood events
- The Township has 1 known property that experiences repetitive loss during flood events
- The Township tornado siren does not reach all incorporated areas
- The Township experiences heavy runoff on Harrisburg-Georgesville Rd and Gay Rd during flood, severe weather and winter weather events
- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- The Township does not have a Comprehensive Plan

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.30.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.30-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Study Mitigation Opportunities at Zuber Road (Homeowners' property loss due to flooding)	Franklin County Engineer	No Progress	Yes	-	-
Seek funding for repetitive loss structures to permanently reduce damage to these structures* (1 known property est. at 100,000 /4 years)	Township Trustees office	No Progress	Yes	-	-
Increase coverage of tornado sirens in the township	Township Trustees office	No Progress	Yes	-	-
Reduce runoff flooding on Harrisburg-Georgesville Rd. and Gay Rd.	Township Trustees office	No Progress	Yes	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Pleasant Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Pleasant Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Pleasant Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.30-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	X	-	X	-	-	X
Disease Outbreak	X	-	-	X	X	-	X	-	-	X
Drought	X	-	-	X	X	-	X	-	-	X
Earthquake	X	-	-	X	X	-	X	-	-	X
Extreme Temp	X	-	-	X	X	-	X	-	-	X
Flood	X	X	-	X	X	X	X	X	-	X
Geologic (Erosion)	X	-	-	X	X	-	X	-	-	X
Severe Summer Weather	X	-	-	X	X	-	X	-	-	X
Severe Winter Weather	X	X	-	X	X	-	X	X	-	X
Tornado	X	X	-	X	X	-	X	X	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.30-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Pleasant Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.30-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Pleasant Township-001	Study Mitigation Opportunities	Problem: Residents at Zuber Road experience property loss during flood events Solution: The Township will work the Franklin County Engineer to conduct a study of flood mitigation practices near Zuber Road.	Flood	1,2	1 to 3 years	Pleasant Township, Franklin County Engineer	HMGP, BRC, FMA, Local Budget	Reduce the impacts to property during flood events	High	High	LPR, SIP	PP, PP
2023-Pleasant Township-002	Repetitive Loss Structures	Problem: The Township has 1 known property that experiences repetitive loss during flood events Solution: The Township will work with Franklin County to retrofit or elevate repetitive loss structures so that the lowest floor, including the basement is raised above the base flood elevation	Flood	2,3,6	Up to 5 years	Pleasant Township, Franklin County Engineer	HMGP, FMA, Local Budget	Reduce impacts to property during flood events	High	High	SIP	PP
2023-Pleasant Township-003	Increase coverage of Tornado sirens	Problem: The Township tornado siren does not reach all incorporated areas Solution: The Township will work with the National	Tornado	2,3,5	1 to 2 years	Pleasant Township, Franklin County, NWS	Local Budget	Increase warning time for tornado events	Low	High	EAP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Weather Service (NWS) to obtain new or additional tornado sirens to increase coverage										
2023-Pleasant Township-004	Improve Stormwater Drainage	<p>Problem: The Township experiences heavy runoff on Harrisburg-Georgesville Rd and Gay Rd during flood, severe weather and winter weather events</p> <p>Solution: The Township will work with Franklin County to increase drainage or adsorption capacities with detention and retention basins, spillways and/or drain widening or upsizing culverts</p>	Flood, Severe Summer Weather, Severe Winter Weather	1	Up to 5 years	Pleasant Township Trustees Office, Franklin County	HMGP, FMA, Local Budget	Reduce risk of flood overflow on roadways	High	High	SIP	NR
2023-Pleasant Township-005	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather,	2,4,5	1 to 2 years	Franklin County EM&HS, Pleasant Township	Local Budget	Increase awareness of potential hazard risks, reduce loss of life and property	Low	High	EAP	PI, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Tornadoes									
2023-Pleasant Township-006	Develop Comprehensive Plan	<p>Problem: The Township does not have a Comprehensive Plan</p> <p>Solution: The Township will work with Franklin County to develop a comprehensive plan that will address hazard events and how to prepare for future conditions</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	1,4	1 to 2 years	Franklin County, Pleasant Township	Local Budget	Reduce risk of loss of life and property	Low	High	LPR	PR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.30-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Pleasant Township-001	Study Mitigation Opportunities	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2023-Pleasant Township-002	Repetitive Loss Structures	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2023-Pleasant Township-003	Increase coverage of Tornado sirens	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Pleasant Township-004	Improve Stormwater Drainage	1	1	1	1	1	1	1	1	1	1	1	0	1	1	12	High
2023-Pleasant Township-005	All-Hazards Education Campaign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Pleasant Township-006	Develop Comprehensive Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

DRAFT

SECTION 9. JURISDICTIONAL ANNEXES

9.31 PRAIRIE TOWNSHIP

This section presents the jurisdictional annex for the Prairie Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Prairie Township participated in the planning process, an assessment of the Prairie Township 's risk and vulnerability, the different capabilities used in the Prairie Township, and an action plan that will be implemented to achieve a more resilient community.

9.31.1 Hazard Mitigation Planning Team

The Prairie Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Prairie Township departments, including the Township Administrator. The Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.31-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Allen Scott/Chief	Name/Title:	James Jewell/Township Administrator
Address:	23 Maple Drive, Columbus, OH 43228	Address:	23 Maple Drive, Columbus, OH 43228
Phone Number:	614-982-2152	Phone Number:	614-982-2181
Email:	AScott@Prairietownship.org	Email:	jjewell@prairietownship.org
NFIP Floodplain Administrator			
Name/Title:	Matt Brown / Franklin County Floodplain Coordinator		
Address:	150 South Front Street, Columbus, Ohio 43215		
Phone Number:	614-525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors:			
Name/Title:		No additional contributors	
Method of Participation:			

9.31.2 Municipal Profile

The Prairie Township is in the western part of Franklin County and is bordered by Pleasant Township to the south, Brown and Norwich Townships to the north, Franklin and Jackson Townships to the east and Madison County to the west. Most of eastern Prairie Township is occupied by the city of Columbus and other parts of the Township have been annexed by other municipalities.

According to the American Community Survey, the 2021 population for the Prairie Township was 17,433, a 5.67 percent increase from the 2010 Census population of 16,498. Data from the 2021 American Community Survey indicates that 6.3 percent of the population is 5 years of age or younger and 12.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.31.3 Jurisdictional Capability Assessment and Integration

The Prairie Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Prairie Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Prairie Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.31-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Ohio Building Code & Residential Code of Ohio	Local/County	Building Department
<i>How does this reduce risk?</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1, 2, and 3 family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to counties building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, Mechanical and Planning uses. The Residential code gives builders a pre identified checklist prior to construction leading to safer actions to accomplish goals.				
Zoning/Land Use Code	Yes	November 1983	Local/County	Building Department
<i>How does this reduce risk?</i> Helps to ensure appropriate separations and buffering between incompatible land uses. Prohibits development in floodways and requires development in floodway fringe areas to be designed so as to reduce risk.				
Subdivision Ordinance	Yes	Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012	Local/County	Building Department
<i>How does this reduce risk?</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Franklin Soil and Water Conservation District	Local/County	Franklin Soil and Water Conservation District
<i>How does this reduce risk?</i> Shows best management practices for stormwaters and gives the steps for members to receive their permit requirements and construction requirements.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	Yes	Big Darby Accord Advisory Panel	Local/County	Big Darby Accord Advisory Panel
<i>How does this reduce risk?</i> Big Darby Accord – controlled growth governed by a multi-jurisdictional board				
Environmental Protection Ordinance	Yes	Ohio EPA	State	EPA
<i>How does this reduce risk?</i> Open Burning rules and regulations, flood plain, protected wetlands				
Flood Damage Prevention Ordinance	Yes	Franklin County Economic Development Dept	Local/County	NFIP Administrator
<i>How does this reduce risk?</i> Conditional Use/NFIP				
Wellhead Protection	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Franklin County EMA	Local/County	Emergency Management
<i>How does this reduce risk?</i> Franklin County Emergency and Homeland Security				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Prairie Township Comprehensive Plan Update	Local	Planning Department
<i>How does this reduce risk?</i> Controlled growth with an emphasis on density				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i> Makes for a more efficient response time for our first responders				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i> Ex: Chipping service / internal policy speeds up response time when services are needed				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Storm Water Manual. March 13th, 2012	County	Franklin County Drainage Engineer
<i>How does this reduce risk?</i> The purpose of the Manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	Yes	Big Darby Accord Advisory Panel	Local	Big Darby Accord Advisory Panel
<i>How does this reduce risk?</i> Darby Accord – protects our ecosystem and area lands				
Economic Development Plan	Yes	Franklin County Economic Development Strategic Plan, Adopted May 2019	Local	Franklin County Economic Department
<i>How does this reduce risk?</i> Includes a goal that Economic development activities and programs should promote and improve environmental sustainability.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Franklin County Emergency Operations Plan 2021	County	Franklin County EMA
<i>How does this reduce risk?</i> Addresses response for all hazards (man-made, technological and natural) This document protects, mitigates, responds, and prevents all disasters.				
Continuity of Operations Plan	Yes	Prairie Township	Local	Township Administration
<i>How does this reduce risk?</i> Chain of command				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Latest 2021 update	County	Franklin county EMA
<i>How does this reduce risk?</i> Identifies Risk and Threats Throughout the community and scales them allowing for strategic planning based on specific hazards.				
Post-Disaster Recovery Plan	Yes	Disaster Recovery Plan May 2017	County	Franklin county EMA
<i>How does this reduce risk?</i> Intended to be a pre-disaster recovery planning document as well as a guide for post-disaster recovery procedures				
Public Health Plan	Yes	Franklin County Public Health	County	Yes
<i>How does this reduce risk?</i> Franklin County Public Health				
Other	-	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Prairie Township to oversee and track development.

Table 9.31-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Commercial Building and Zoning Department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	County, floodplain
Do you have a buildable land inventory? • If yes, please describe	Yes	Land Properties
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Prairie Township and their current responsibilities that contribute to hazard mitigation.

Table 9.31-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Board of Zoning Appeals
Zoning Board of Adjustment	Yes	Commercial Building and Zoning Department
Planning Department	Yes	Commercial Building and Zoning Department
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	COCIC,
Public Works/Highway Department	Yes	Road Department
Construction/Building/Code Enforcement Department	Yes	Commercial Building and Zoning Department
Emergency Management/Public Safety Department	Yes	Fire Department
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Tornado (County)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Road Department
Mutual aid agreements	Yes	Fire Department
Human Resources Manual	Yes	-
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Commercial Building and Zoning Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Commercial Building and Zoning Department
Planners or engineers with an understanding of natural hazards	Yes	Road Department/Fire Department
Staff with expertise or training in benefit/cost analysis	Yes	Administration
Professionals trained in conducting damage assessments	Yes	Fire Department
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Grove City IT Contract – GIS Department
Environmental scientist familiar with natural hazards	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Surveyor(s)	Yes	Franklin County Engineer
Emergency Manager	Yes	Franklin County EMA
Grant writer(s)	Yes	Consider the following: Are data and maps from the HMP used to support documentation in grant applications? Contracted
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community? Enforcing applicable protocols and safety measures		

Fiscal Capability

The table below summarizes financial resources available to the Prairie Township.

Table 9.31-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No – development areas
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Prairie Township.

Table 9.31-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Social Media/Communication
Personnel skilled or trained in website development	Yes	Administration
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Tornado
Natural disaster/safety programs in place for schools	Yes	Fire/tornado safety

Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Fire safety in public schools
---	-----	-------------------------------

Community Classifications

The table below summarizes classifications for community programs available to Prairie Township.

Table 9.31-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Commercial Building Code/ County residential code	1984
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Fire	
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.31-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic (Erosion)	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.31.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Prairie Township .

Table 9.31-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Prairie (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Prairie Township.

Table 9.31-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Tamara Avenue – no list
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Assess through building engineers. Tamara Properties - single family homes, 6 properties demolished, total of 3.6 acres
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	Tamara Properties – 6 properties acquired and demolished (FEMA Grant)
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	N/A
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	N/A
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County

NFIP Topic	Comments
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Outside consulting to determine if substantial improvement needed Fire Department can determine if safety measures are needed
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Drainage upgrades for properties with flooding issues
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	N/A County
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	N/A
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes through recommendations
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.31.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.31-11. Number of Building Permits for New Construction Since the Previous HMP

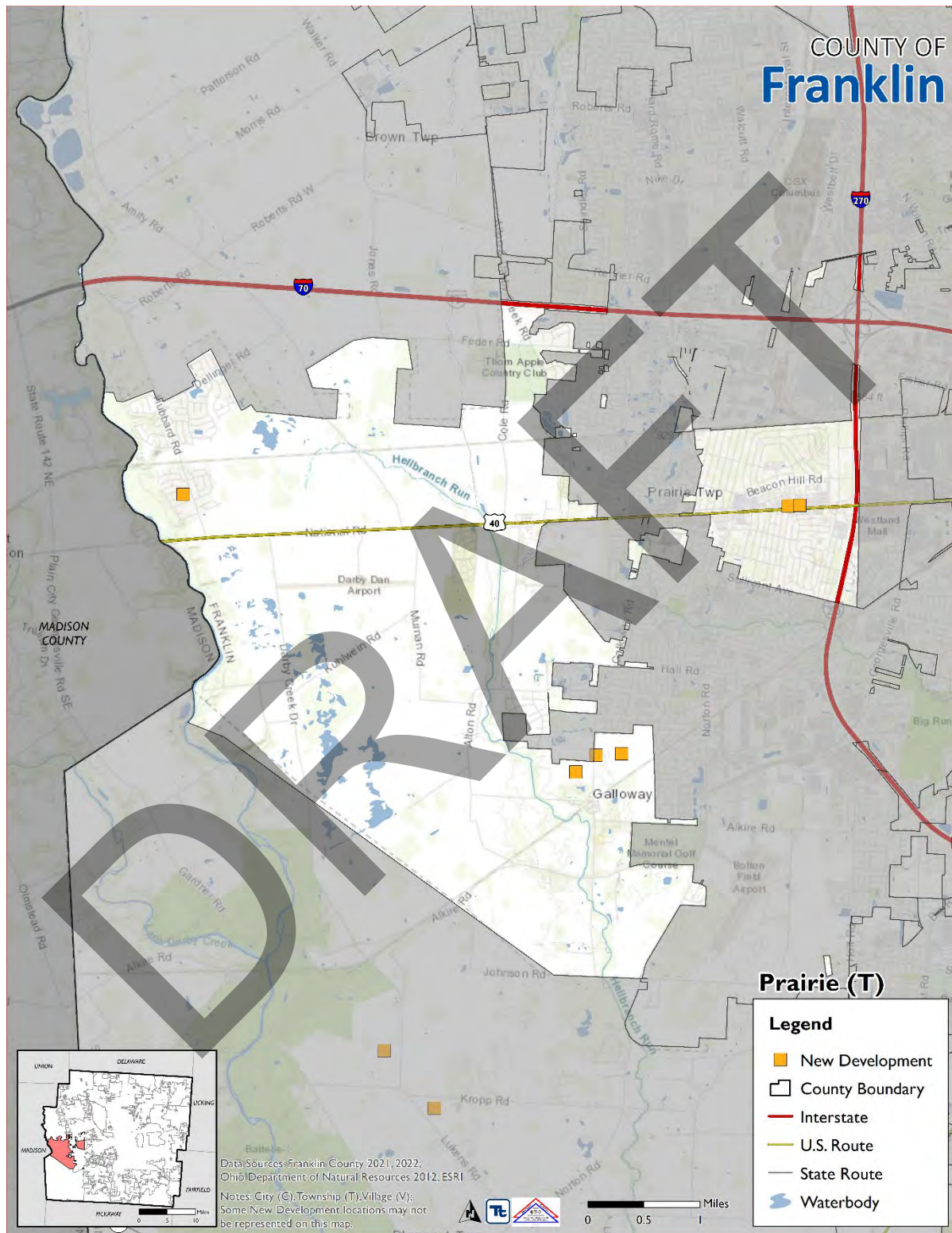
Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	7	0	2	0	9	0	13	0	11	0
Multi-Family	0	0	0	0	0	0	1	0	0	0
Other (commercial, mixed-use, etc.)	0	0	2	0	0	0	0	0	0	0
Total Permits Issued	7	0	4	0	9	0	14	0	11	0

Table 9.31-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Urgent Care	Commercial	3	4832 W Broad Street 240-006498	-	Urgent care, AT&T, Taco Nice restaurant - complete
Chipotle	Commercial	1	240-006880	-	Restaurant – complete
Dunbury Greene	Residential	60	4478 Westport Road 240-005294	-	3 story, 60-unit senior apartments - ongoing
Known or Anticipated Major Development in the Next Five (5) Years					
Villages at Galloway	Residential	93 Phase 1	240-000112	-	
Galloway East	Commercial + Residential	Single Family, 289 Patio Homes 106 apartments	1860 Galloway Road 240-000146	-	Commercial, single-family res, patio homes, multi-family apartments

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.31-1. Prairie Township New Development



9.31.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Prairie Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Prairie Township has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.31-2. Prairie Township Hazard Area Extent and Location Map-Flood

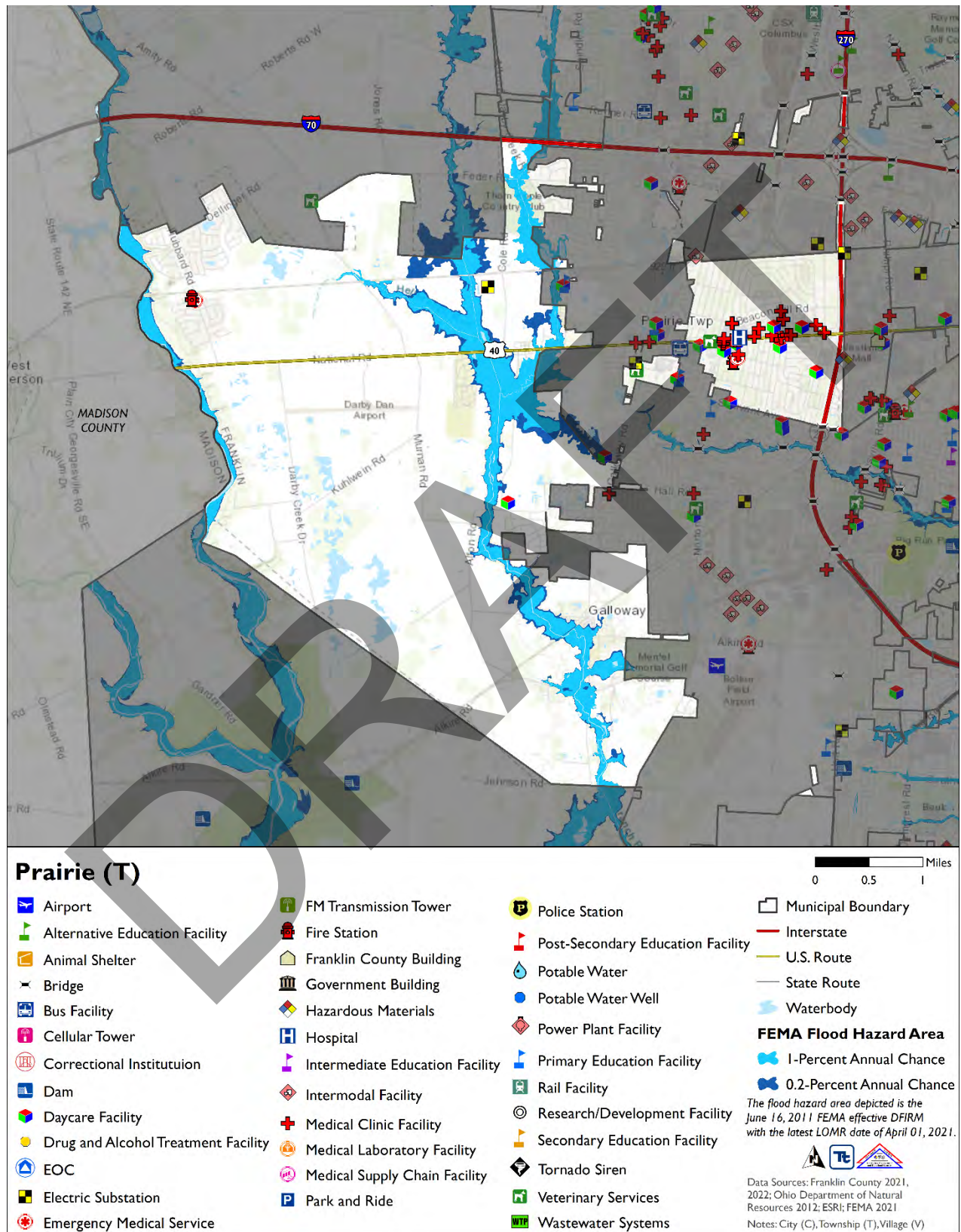


Figure 9.31-3. Prairie Township Hazard Area Extent and Location Map-Inland Erosion

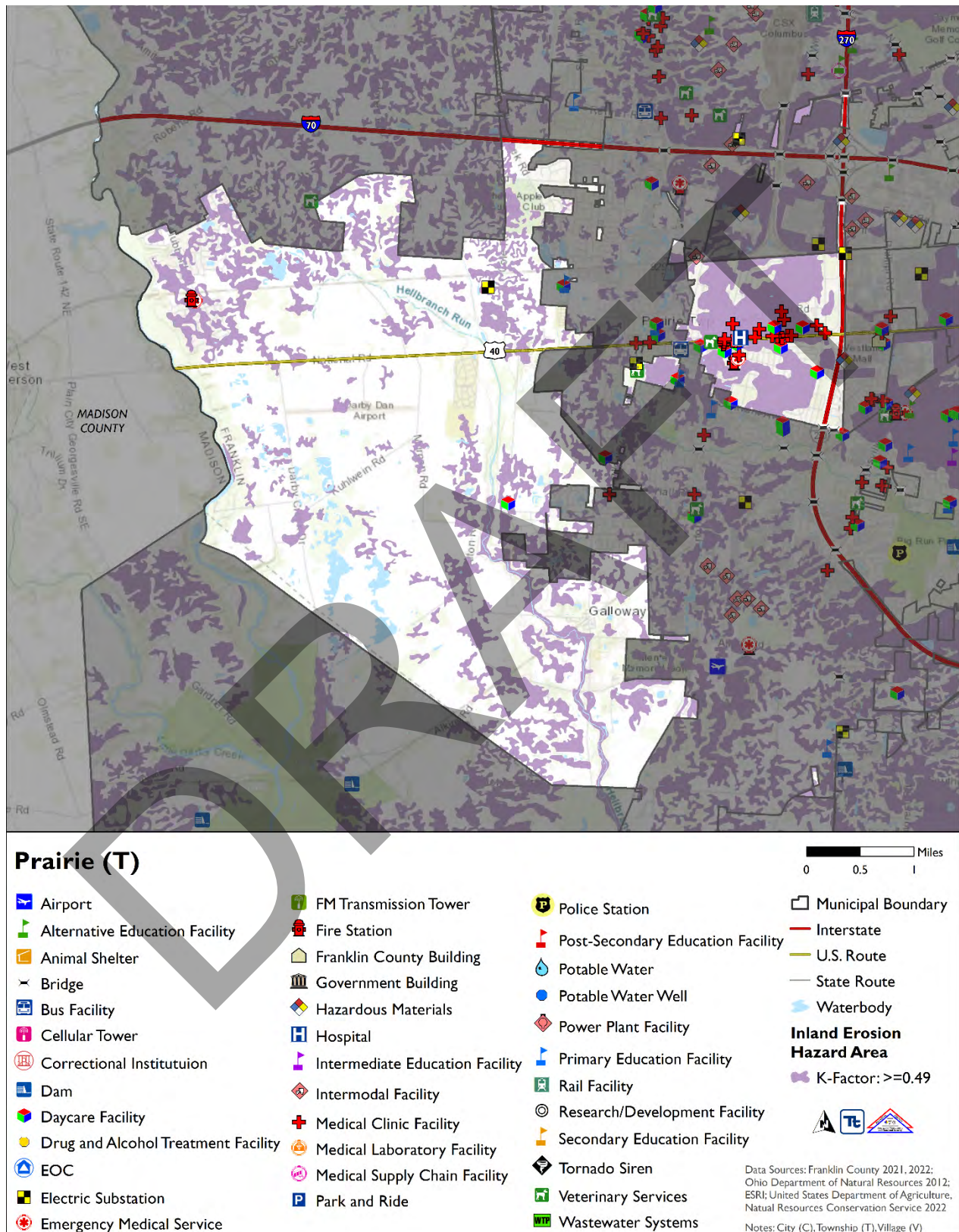
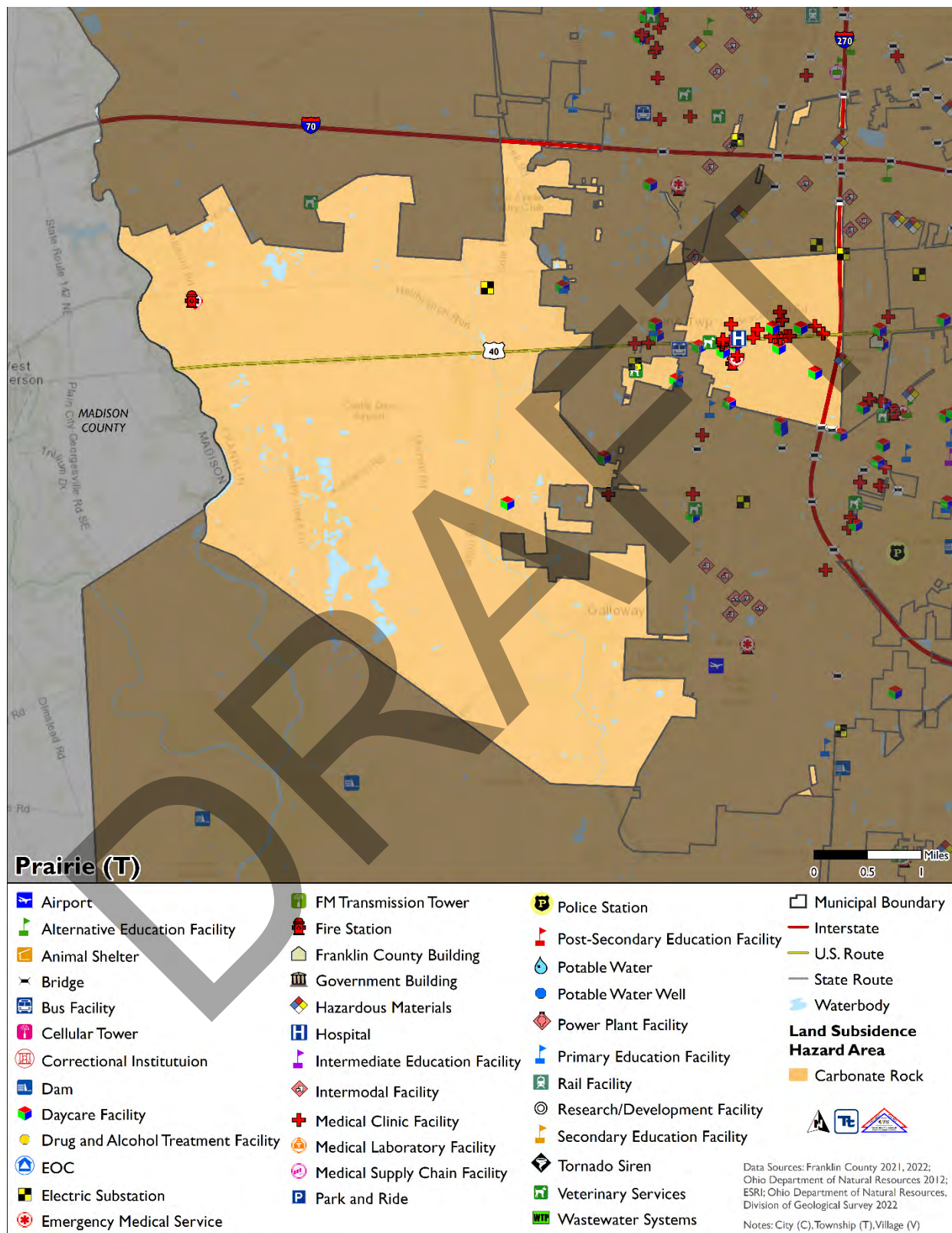


Figure 9.31-4. Prairie Township Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Prairie Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Prairie Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.31-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The Township did not experience any notable damages or losses. The Fire Department – assisted with aid for Grove City
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	Financial/Staffing Township Wide – Overtime / COVID revenue helped PTCC salaries, Fire Salary Costs, admin leave for COVID positives Sherriff's Contract)

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community

capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Prairie Township. The Prairie Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Prairie Township indicated the following:

- The Township agrees with all hazard rankings.

Table 9.31-14. Hazard Ranking Input

Hazard	Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.31-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Prairie Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	45	41
Subsidence (Karst/Carbonate Rock) Hazard Area	58	50
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Prairie Township identified the following vulnerabilities within its community:

- There is increased flooding along Tamara Avenue that limits and sometimes eliminates roadway access to 22 homes and limits access of emergency services.
- The entire Village of Galloway floods causes standing water that draws in mosquitos and omits an odor. There are also other parts of the Township that experience flooding problems. *
- The Township residents do not have a safe place to go in the event of an extreme hazard event. The homeless population is extremely at risk. *
- The Township does not currently have a generator at the Community Center which hinders it from being used as a shelter or clinic during power outages.
- The Township currently does not have any information readily available to residents regarding the current hazards of concern.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.31.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.31-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for repetitive loss structures to permanently reduce damage to these structures (2 known properties est. at 300,000 /4 years)	Township Trustee's office	Completed	No	-	-
Reduce flooding along Tamara Avenue that impacts road access to twenty-two homes. (5 years)	Township Trustee's office	Ongoing	Yes	-	-
Seek funding for equipment to establish a tree trimming program to reduce the amount of fallen tree limbs along the public right-of-way	Township Trustee's office	Ongoing	Yes	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Prairie Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Prairie Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Prairie Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.31-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	X	-	X	-	-	X	-	-	X
Disease Outbreak	-	X	-	X	-	-	X	-	-	X
Drought	-	X	-	X	-	-	X	-	-	X
Earthquake	-	X	-	X	-	-	X	-	-	X
Extreme Temp	-	X	-	X	-	-	X	-	-	X
Flood	-	X	-	X	-	-	X	-	X	X
Geologic	-	X	-	X	-	-	X	-	-	X
Invasive Species	-		-	X	-	-	X	-	-	-
Severe Summer Weather	-	X	-	X	-	-	X	-	X	X
Severe Winter Weather	-	X	-	X	-	-	X	-	X	X
Tornado	-	X	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.31-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Prairie Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.31-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Prairie Township-001	Flood Reduction along Tamara Avenue	<p>Problem: There is increased flooding along Tamara Avenue that limits and sometimes eliminates roadway access to 22 homes and limits access of emergency services.</p> <p>Solution: The Township will implement a flood study to determine the best and most cost-effective way to reduce flooding along Tamara Avenue. This would ensure that emergency services have better access to the 22 homes impacted.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	Homeowners, Engineer, Administration	FMA, HMGP, BRIC, CDBG, Township Budget	Emergency access will be available to the 22 homes even during a precipitation event.	TBD after engineer study	High	SIP	SP
2023-Prairie Township-002	Old Village of Galloway Drainage *	<p>Problem: The entire Village of Galloway floods causes standing water that draws in mosquitos and omits an odor. There are also other parts of the Township that experience flooding problems.</p> <p>Solution: The Township will conduct a flood study in the Village of Galloway and throughout the entire</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	Homeowners, Engineer, Administration	FMA, HMGP, BRIC, CDBG, Township Budget	The Standing water issue will be fixed	TBD after engineer study	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Township and will implement the best and most cost effective solution to fix flooding and drainage issues associated with the standing water.										
2023-Prairie Township-003	Shelter Designation*	<p>Problem: The Township residents do not have a safe place to go in the event of an extreme hazard event. The homeless population is extremely at risk.</p> <p>Solution: The Township will designate or develop a shelter that has backup power that will be used during extreme hazard events.</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather Tornado	5	Less than 3 Years	Administration	HMGP, BRIC, Township Budget	Residents will be safer during hazard events	\$20,000	High	EAP	ES
2023-Prairie Township-004	Community Center Generator	<p>Problem: The Township does not currently have a generator at the Community Center which hinders it from being used as a shelter or clinic during power outages.</p> <p>Solution: The Township will conduct a generator study to ensure the proper sized generator will be used and will purchase and install the generator. The Township will</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Severe Summer Weather	5	Less than 5 years	Administration	HMGP, BRIC, EOC, Township Budget	Residents will be able to utilize this as a shelter during power outages	\$100,000	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		perform routine maintenance on the generator.	Severe Winter Weather Tornado									
2023- Prairie Township- 005	Public Education Brochures and Website Update	<p>Problem: The Township currently does not have any information readily available to residents regarding the current hazards of concern.</p> <p>Solution: The Township will update their website to include how to prepare for the hazards of concern, emergency numbers to call, shelters nearby and health information regarding each hazard. The Township will also put this information into a brochure and distribute to the homeless population.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	1	1 Year	Administration	Township Budget	The residents of the Township will become more knowledgeable about the hazards of concern	Staff time	High	EAP	PI

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.31-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Prairie Township-001	Flood Reduction along Tamara Avenue	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-Prairie Township-002	Old Village of Galloway Drainage *	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-Prairie Township-003	Shelter Designation*	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Prairie Township-004	Community Center Generator	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-Prairie Township-005	Public Education Brochures and Website Update	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

DRAFT

SECTION 9. JURISDICTIONAL ANNEX

9.32 CITY OF REYNOLDSBURG

This section presents the jurisdictional annex for the City of Reynoldsburg that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Reynoldsburg participated in the planning process, an assessment of the City of Reynoldsburg's risk and vulnerability, the different capabilities used in the City of Reynoldsburg, and an action plan that will be implemented to achieve a more resilient community.

9.32.1 Hazard Mitigation Planning Team

The City of Reynoldsburg identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Reynoldsburg departments, including building department. The Chief Building Official represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.32-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Yeong T. Jiang, PE, CBO/ Chief Building Official	Name/Title:	Joe Begeny/Mayor
Address:	7232 E Main Street Reynoldsburg, Ohio 43068	Address:	7232 E Main Street Reynoldsburg, Ohio 43068
Phone Number:	614-322-6800	Phone Number:	614-322-6800
Email:	YJiang@reynoldsburg.gov	Email:	jbegeny@reynoldsburg.gov
NFIP Floodplain Administrator			
Name/Title:	Eric Meyer, Planning and Zoning Administrator		
Address:	7232 East Main Street, Reynoldsburg, OH, 43068		
Phone Number:	614-322-6829		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.32.2 Municipal Profile

The City of Reynoldsburg is in the eastern side of Franklin County and is encompassed by Truro Township and is bordered by Licking County to the east. Blacklick Creek flows through the City from north to south.

According to the American Community Survey, the 2021 population for the City was 39,803, a 10.89 percent increase from the 2010 Census population of 35,893. Data from the 2021 American Community Survey indicates that 7.2 percent of the population is 5 years of age or younger and 14.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.32.3 Jurisdictional Capability Assessment and Integration

The City of Reynoldsburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Reynoldsburg to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Reynoldsburg and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.32-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Chapter 1339	Local	Planning
<p><i>How does this reduce risk?</i></p> <p>The purpose of the Ohio Building Code as adopted herein is to establish uniform minimum requirements for the erection, construction, repair, alteration and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following:</p> <ul style="list-style-type: none"> (a) Establish such requirements, in terms of performance objectives for the use intended. (b) Permit to the fullest extent feasible, the use of materials and technical methods, devices and improvements which tend to reduce the cost of construction and erection without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction. (c) To encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units. 				
Zoning/Land Use Code	Yes	Chapter 1101	Local	Planning
<p><i>How does this reduce risk?</i></p> <p>Responsible development and growth of the City of Reynoldsburg and hereby adopts this Code for the following purposes:</p> <ul style="list-style-type: none"> (1) To promote the achievement of the Comprehensive Land Use Plan for the City; (2) To advance the position of the City as a center of commerce, industry, recreation and culture; (3) To provide for desirable, appropriately located living areas in a variety of dwelling types and at a suitable range of population densities, with adequate provision for sunlight, fresh air and usable open space; (4) To protect residential, commercial, industrial and civic areas from the intrusions of incompatible uses, and to provide opportunities for establishments to concentrate for efficient operation in mutually beneficial relationship to each other and to share services; (5) To ensure preservation of adequate space for commercial, industrial and other activities necessary for a healthy economy; (6) To promote safe, fast and efficient movement of people and goods without sacrifice to the quality of the City's environment and to provide adequate off-street parking; (7) To stabilize expectations regarding future development of the City, thereby providing a basis for wise decisions with respect to such development; (8) To preserve and enhance the quality of the City's environment; (9) To provide for effective signage that is compatible with the surrounding urban environment; and (10) To maintain the safety and potability of public water supplies located within the City. 				
Subdivision Ordinance	Yes	Chapter 1111	Local	Planning
<p><i>How does this reduce risk?</i></p> <p>Notwithstanding any other provisions of the Subdivision Regulations, a proposed division of a parcel of land along an existing public street, whether the parcel to be divided fronts on the street or has access to it by private right-of-way or private driveway, not involving more than five (5) lots after the original tract has been completely subdivided, may be submitted to the Planning Commission for approval without plat.</p>				
Site Plan Ordinance	Yes	Chapter 1109.19	Local	Planning
<p><i>How does this reduce risk?</i></p> <p>A site plan illustrating the following:</p> <ul style="list-style-type: none"> A. The dimensions of property lines, parcel dimensions and adjoining rights-of-way. B. The current zoning of the parcel and all adjacent parcels. C. The location of proposed buildings and structures. D. The location of existing water bodies, streams, drainage ditches, stands of trees and other pertinent features within one hundred fifty (150) feet of the proposed development. E. Setbacks and building separations shall be noted in accordance with zoning requirements. F. A landscape concept plan, including approximate location of all new landscape material and plantings, that addresses the applicable district requirements. G. A transportation and parking plan, including location and number of all parking and loading spaces and location of all proposed walkways and bike/pedestrian access points, that addresses the applicable district requirements. 				
Stormwater Management Ordinance	Yes	Chapter 960.02	Local	Planning
<p><i>How does this reduce risk?</i></p> <p>The ordinance provides regulations for the operation, management and maintenance of the stormwater system and facilities or cause the regulations for the operation, management and maintenance of the stormwater system and facilities to be established by ordinance.</p>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 1335	Local	Planning
<i>How does this reduce risk?</i> It is the purpose of these regulations to promote the public health, safety and general welfare, and to: <ul style="list-style-type: none"> (a) Protect human life and health; (b) Minimize expenditure of public money for costly flood control projects; (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (d) Minimize prolonged business interruptions; (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines and streets and bridges located in areas of special flood hazard; (f) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to protect property and minimize future flood blight areas; (g) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; (h) Minimize the impact of development on adjacent properties within and near flood prone areas; (i) Ensure that the flood storage and conveyance functions of the floodplain are maintained; (j) Minimize the impact of development on the natural, beneficial values of the floodplain; (k) Prevent floodplain uses that are either hazardous or environmentally incompatible; and (l) Meet community participation requirements of the National Flood Insurance Program 				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Chapter 901.05	Local	Planning
<i>How does this reduce risk?</i> In any case where a real and actual emergency exists, making it necessary for an excavation to be made within the limits				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Historic Preservation Ordinance	???	???
Planning Documents				
Comprehensive/Master Plan	Yes	Olde Reynoldsburg Strategic Plan Brice and Livingston Strategic Area Plan	Local	Planning
<i>How does this reduce risk?</i> The comprehensive plan is the culmination of a community-driven effort to determine goals and a corresponding plan for the future, serving as a guide for investment, policy, and decision-making.				
Capital Improvement Plan	Yes	November 2017	Local	Planning
<i>How does this reduce risk?</i> The City of Reynoldsburg maintains and operates the roadways, sanitary sewers, water distribution lines, storm sewers and city parks. The City ensures that potential projects are included in the plan.				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	June 3, 2022	Local	City Admin
<i>How does this reduce risk?</i> The City of Reynoldsburg ("City") is required to prepare a stormwater management program (SWMP) in accordance with 40 CFR 123.25 and Ohio law (OAC 3745-39). This document outlines the City's program to develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System (NPDES) Phase II program.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>Consider the following:</i> <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? 				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Reynoldsburg to oversee and track development.

Table 9.32-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? 	Yes	Building Department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe 	N/A	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Reynoldsburg and their current responsibilities that contribute to hazard mitigation.

Table 9.32-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Department of Development is responsible for land development, land use planning, economic development, zoning, and implementation of a comprehensive plan for the City of Reynoldsburg.
Zoning Board of Adjustment	Yes	Planning and zoning combined under the development department
Planning Department	Yes	Planning and zoning combined under the development department
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	Parks & Recreation Commission
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The primary mission of the Reynoldsburg Street Department is to provide a safe and maintained road network.
Construction/Building/Code Enforcement Department	Yes	The Building Division is responsible for regulating the Ohio Building Code, the Residential Code of Ohio, the National Electrical Code, the Property Maintenance Code, and the Flood Damage Prevention Code.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Water/Wastewater Department is responsible for the operation and maintenance of the water distribution and sewer collection system and billing of water and sewer, refuse and storm water, as well as all fire hydrants and water meters throughout the city.
Mutual aid agreements	No	-
Human Resources Manual		Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Reynoldsburg.

Table 9.32-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Reynoldsburg.

Table 9.32-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Reynoldsburg.

Table 9.32-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other			

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.32-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.32.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Reynoldsburg.

Table 9.32-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Reynoldsburg (C)	52	124	\$885,582.78	16	2

Sources: a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Reynoldsburg.

Table 9.32-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	City of Reynoldsburg maintains a GIS system incorporating FEMA flood map to identify all floodplain areas and properties within the City limits.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No at the present time No at the present time
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Yes, SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. None
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	1 Property owner

NFIP Topic	Comments
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	City of Reynoldsburg Building Department
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Yes Any training will help
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, consultation, inspections
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Based on the definition in Ohio Building Code & flood damage prevention ordinance.
What are the barriers to running an effective NFIP program in the community, if any?	No
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	June 2, 2022
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Chapter 1335 / Ordinance 29-2022 03/28/2022
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Yes, meet the minimum requirements
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, all new development projects go through site plan review for floodplain requirements.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.32.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.32-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	0	1	0	1	1	24	0	66	0
Multi-Family	10	0	0	0	144	0	96	0	62	0

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Other (commercial, mixed-use, etc.)	7	1	2	0	6	1	3	1	5	0
Total Permits Issued	18	1	3	0	151	2	123	1	133	0

Table 9.32-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Kroger Building	Commercial	1 building	6580 E Main Street	None	New Kroger store building; Completed
Truro Township Fire Station	Commercial	1 building	6900 E Main Street	None	New fire station building; completed
Chick-Fil-A	Commercial	1 building	2364 Taylor Park Dr	Floodplain	New restaurant building; Completed
Laurel Bluff Apartments	Residential	170 units / 32 building	Taylor Road	None	170 Units in 32 apartment buildings Completed
Sheetz Gas Station	Commercial	1 building	8271 E Broad Street	None	New Sheetz gas station; Completed
Spring Hill Farm Phase 1, 2, 3	Residential	112 Single family homes	Waggoner Road	None	112 Single family homes; In progress
Ravines at Taylor	Residential	128 units / 15 buildings	Taylor Road SW	Floodplain	128 Rental units in 15 buildings; In progress
Thornton Hall Development	Residential	264 units / 12 buildings	Eastwood Drive West	None	12 Residential buildings; 24 units per building; In progress
Known or Anticipated Major Development in the Next Five (5) Years					
Rose Hill Townhome Development	Residential	76 Townhomes / 15 buildings	Rosehill Road	Floodplain	76 townhome units in 15 buildings; Building 1 completed; Others in progress
Central Ohio Primary Care	Commercial	1 building	8050 E Main Street	None	Health care facilities; Construction starts in 2023
West Licking County Fire Station #404	Commercial	1 Building	8070 Taylor Road SW	None	New building for Fire station #404; Construction starts in 2023
Columbus Metropolitan Library @ Reynoldsburg	Commercial	1 building	1402 Brice Road	None	Public library Reynoldsburg branch; Construction starts in 2023
Wilson Ridge Townhome Development	Residential	81 Townhomes / 15 buildings	Waggoner Road	Floodplain	81 Townhome units in 15 buildings; Planning stage
Spring Hill Farm Phase 4, 5, 6	Residential	242 Single family homes	Waggoner Road	None	242 Single family homes; construction starts in 2023
The Alliance	Commercial	5 to 6 Buildings	E Main Street & Brice road	None	Conference center, garage, hotel, restaurants. Construction starts in 2023
Eastwood Development Phase 1, 2, and 3	Residential	248 Single family	Park Place & Sunny Drive	None	248 Single family residential lots; Planning stage
Eastwood Development Lot 5	Residential	159 units	Eastwood Drive East	None	159 units in 24 Residential buildings; Planning stage
Trivium Reynoldsburg	Commercial	2 buildings	E main Street & Lancaster Avenue	Floodplain	2 commercial buildings; Planning stage
Oliver Development	Residential	145 units / 11 Buildings	Lancaster Avenue	None	145 Residential units; Planning stage



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Maplewood Townhome	Residential	71 units / 13 buildings	Summit Road	None	71 residential units in 13 buildings; Planning stage

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.32.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Reynoldsburg's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Reynoldsburg has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.32-1. City of Reynoldsburg Hazard Area Extent and Location Map-Flood

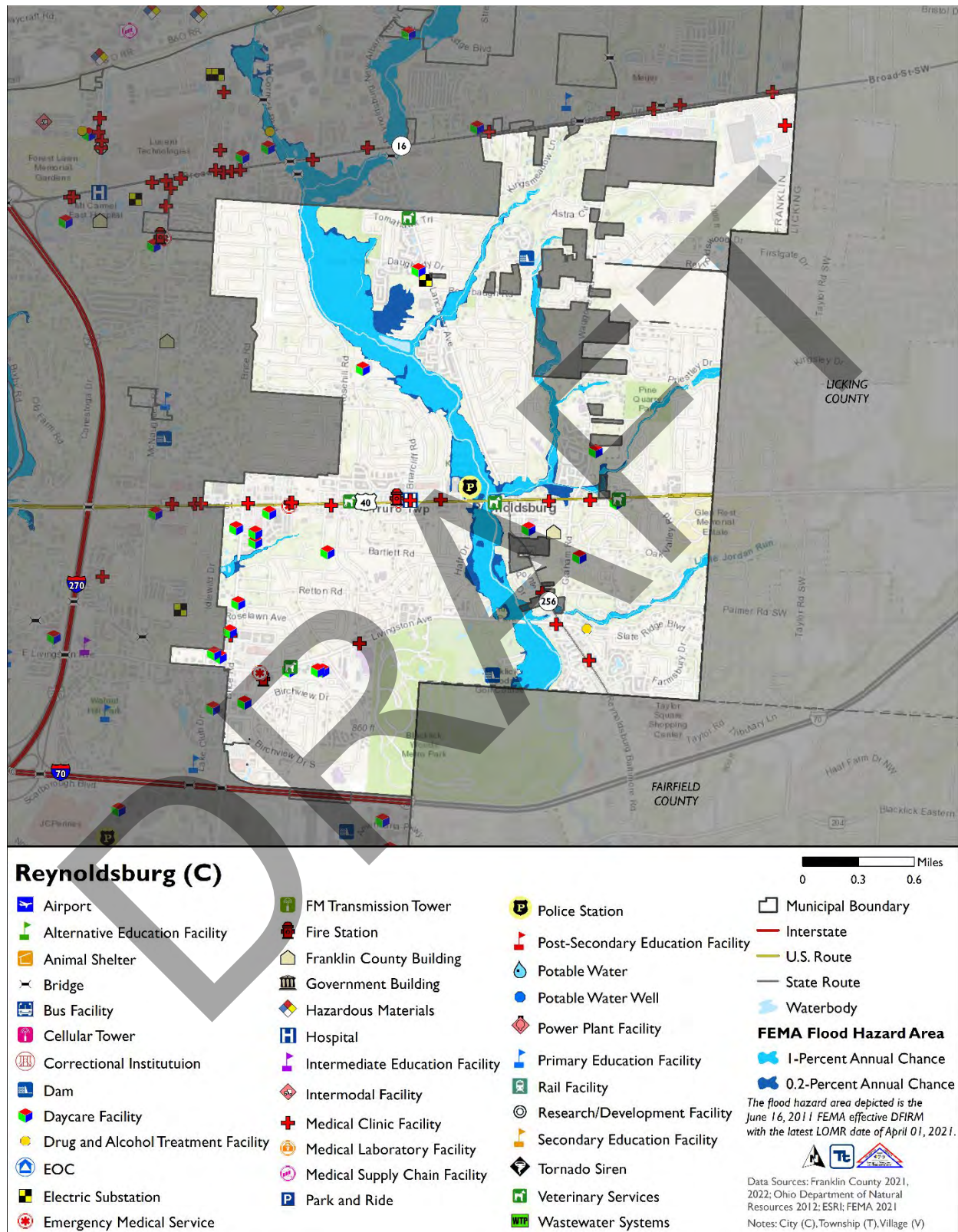


Figure 9.32-2. City of Reynoldsburg Hazard Area Extent and Location Map-Inland Erosion

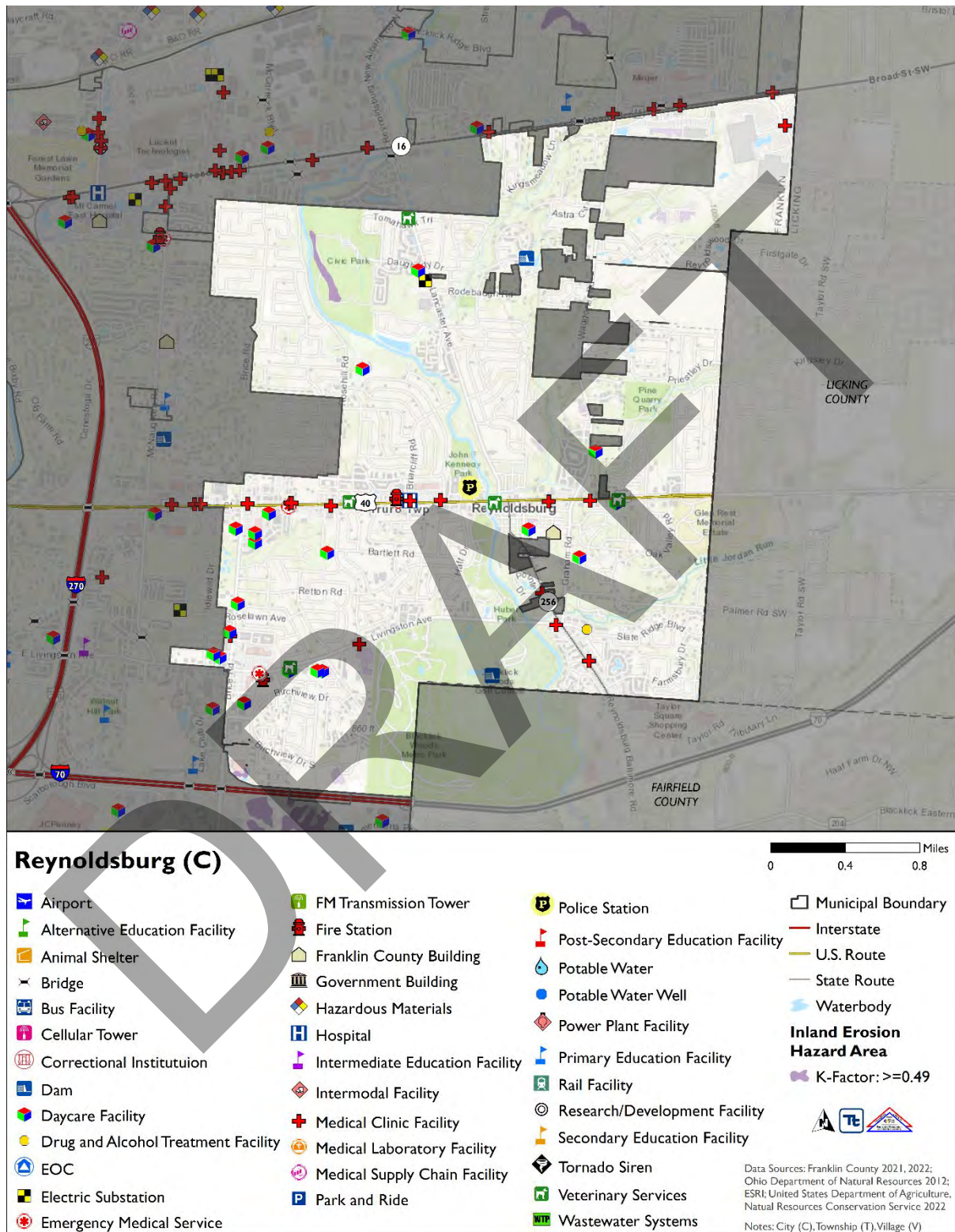
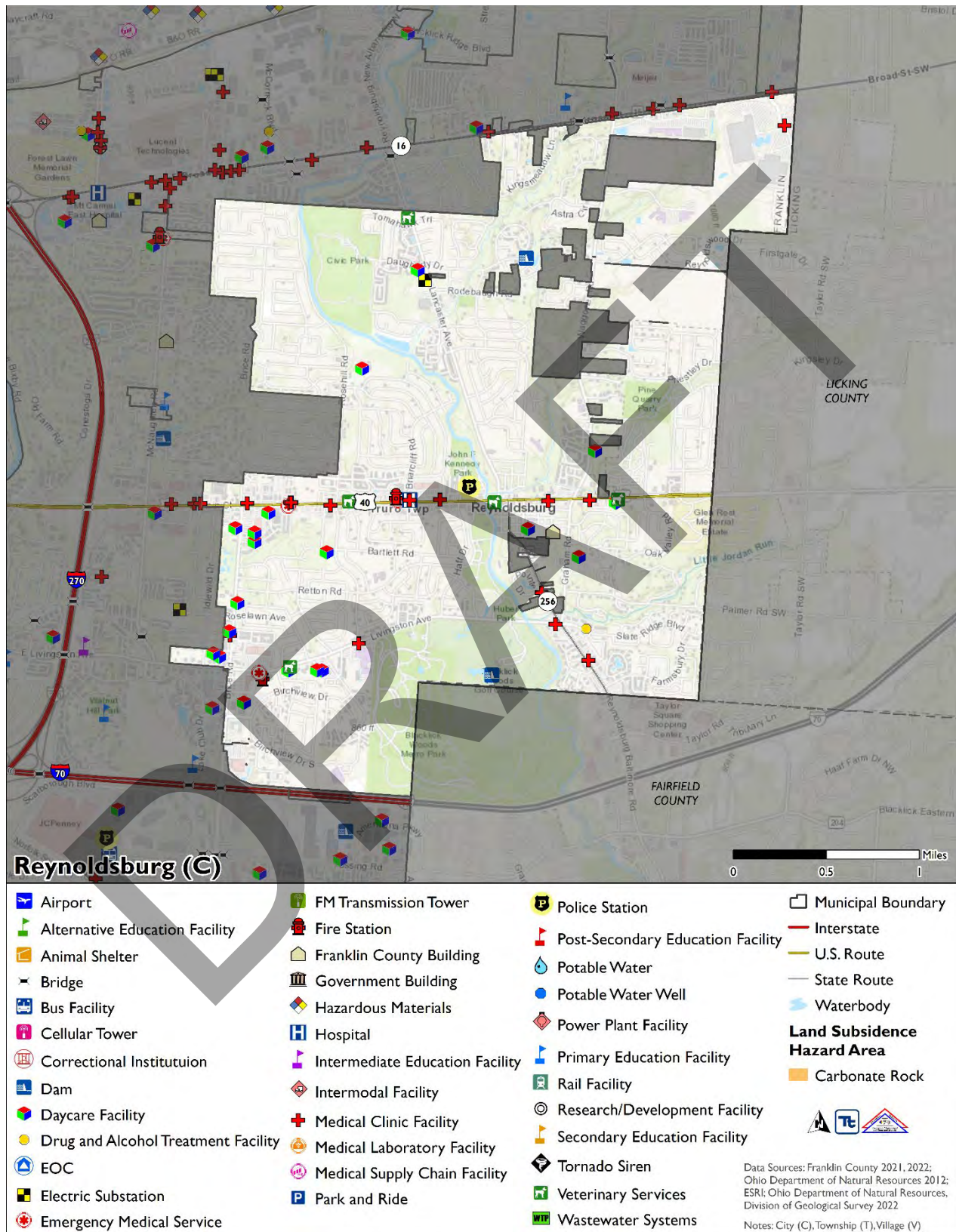


Figure 9.32-3. City of Reynoldsburg Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Reynoldsburg's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Reynoldsburg experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.32-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Town did not experience any additional damages losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Town did not experience any additional damages losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Town did not experience any additional damages losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Reynoldsburg. The City of Reynoldsburg reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.32-14. Hazard Ranking Input

Hazard	Rankings
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium



Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.32-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Reynoldsburg

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Reynoldsburg identified the following vulnerabilities within its community:

- Reynoldsburg has 16 repetitive loss properties and 2 severe repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Reynoldsburg Police Department
- The City of Reynoldsburg has experienced flooding at a higher rate than in the past due to extreme weather conditions exacerbated due to climate change. The area impacted is along Blacklick Creek from the Main Street Bridge in between Davidson Dr. and Lancaster along the Huber Park area.
- The City of Reynoldsburg has suffered from increase severity of flooding due to extreme weather. This has impacted areas of Reynoldsburg that have been built out but now sit in the floodway/zone.
- The City has limited information on location and capabilities of critical infrastructure in the City.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.32.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.32-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed)	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
		If in progress or completed, please describe the funding source, cost and who is implementing.	Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for outdated NFIP maps for the Blacklick Creek area in coordination with areas that flood. (20,000 / 2 years)	Mayor's Office			-	-
Evaluate smaller streams that are draining from newly developed areas in adjoining municipalities affecting the city.(4,000,000 / 2 years)	Mayor's Office			-	-
Seek funding for back-up generators for critical public buildings. (50,000 / 1 year	Mayor's Office			-	-
Research and determine the cause of municipal building lightning strikes and why it has been hit by lightning so many times. Seek funding to permanently mitigate cause, if possible.(20,000 / 1 year)	Mayor's Office			-	-
Seek funding for lightning detection/warning for city parks. (40,000 / 1 year	Mayor's Office			-	-
Seek funding for back-up generators for evacuation route intersections. (120,000 / 6 months	Mayor's Office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Reynoldsburg identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Reynoldsburg has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Reynoldsburg participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.32-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	-	-	X	-	-	X	-	-	-
Disease Outbreak	-	-	-	X	-	-	X	-	-	-
Drought	-	-	-	X	-	-	X	-	-	-
Earthquake	-	-	-	X	-	-	X	-	-	-
Extreme Temp	-	-	-	X	-	-	X	-	-	-
Flood	-	X	-	X	-	-	X	-	X	-
Geologic	-	-	-	X	-	-	X	-	-	-
Invasive Species	-	-	-	X	-	-	X	-	-	-
Severe Summer Weather	-	X	-	X	-	-	X	-	X	-
Severe Winter Weather	-	X	-	X	-	-	X	-	X	-
Tornado	-	-	-	X	-	-	X	-	-	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.32-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Reynoldsburg will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.32-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023- City of Reynoldsburg-001	Repetitive Loss Mitigation	<p>Problem: Reynoldsburg has 16 repetitive loss properties and 2 severe repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	The Repetitive loss structures will no longer flood as frequently.	>\$100,000 per property	High	SIP	SP
2023- City of Reynoldsburg-002	Flood Vulnerability Evaluation	<p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Reynoldsburg Police Department <p>Solution: The City will conduct a feasibility assessment to determine what</p>	Flood	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	Critical facilities will be able to continue to operate and will not	TBD after feasibility assessment	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		<p>additional floodproofing measures are needed at the facility to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p>						flood as often.				
2023- City of Reynoldsburg-003	Blacklick Creek Stream Restoration	<p>Problem: The City of Reynoldsburg has experienced flooding at a higher rate than in the past due to extreme weather conditions exacerbated due to climate change. The area impacted is along Blacklick Creek from the Main Street Bridge in between Davidson Dr. and Lancaster along the Huber Park area.</p> <p>Solution: The City has started the process for Blacklick Creek Stream Bank restoration and stabilization. The project will allow improved water flow from areas north of Reynoldsburg. This will be accomplished by improved directional devices that will focus the water to the center line. Additionally, the creek will be cleared of debris from fallen/dead trees to other waste. This project will also address erosion along the east and west banks by removing invasive species and replaced with soil enhancing vegetation. The design process is complete, funding is approved, and work is set to begin in late 2023.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	NFIP Floodplain Administrator	HMGP, FMA, BRIC, CDBG	The Creek will experience reduced flooding	\$650,000	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023- City of Reynoldsburg-004	Flood Mitigation Study	<p>Problem: The City of Reynoldsburg has suffered from increase severity of flooding due to extreme weather. This has impacted areas of Reynoldsburg that have been built out but now sit in the floodway/zone.</p> <p>Solution: The Flood mitigation study will review all waterways into and out of the City of Reynoldsburg, identify cost-effective solutions or courses of action to prevent loss of property.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	NFIP Floodplain Administrator	HMGP, FMA, BRIC, CDBG	The City will experience reduced flooding	\$330,000	High	SIP	SP
2023- City of Reynoldsburg-005	Critical Infrastructure Database	<p>Problem: The City has limited information on location and capabilities of critical infrastructure in the City.</p> <p>Solution: The City will create and maintain a GIS database of all critical infrastructure in the City. The strategy is as follows:</p> <ul style="list-style-type: none"> Identify all critical infrastructure in the city. This includes things like hospitals, power plants, water treatment facilities, and transportation hubs. Collect data on each piece of infrastructure, such as its location, size, function and ability to provide backup power. Enter the data into a GIS database. Make the database accessible to emergency management personnel. 	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	6	1 Year	Department of Information Systems, GIS Department of Public Safety, Division of Building, Department of Economic Development	City Budget, HMGP	The City will be more aware of critical infrastructure and their capabilities.	\$1,000	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		This strategy would be valuable for emergency management because it would provide a centralized location for all critical infrastructure of the City.										
2023- City of Reynoldsburg-006	Public Education	<p>Problem: The City does not have a public education method to educate their residents on how to prepare, act and recover, before, during and after a hazard event.</p> <p>Solution: The City will prepare yearly education seminars to educate City residents on the hazards of concern as identified in the HMP update. This includes distributing brochures to the homeless and elderly, updating websites and using social media to alert and push preventative measures.</p>	Dam/Levee , Disease Outbreak, Drought, Earthquake , Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	5	Ongoing	City Administration	City Budget	The City residents will be better prepared to handle hazard events.	Staff Time	High	EAP	PI

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- **Local Plans and Regulations (LPR)**—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- **Structure and Infrastructure Project (SIP)**—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- **Natural Systems Protection (NSP)**—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- **Education and Awareness Programs (EAP)**—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- **Preventative Measures (PR)**—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- **Property Protection (PP)**—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- **Public Information (PI)**—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- **Natural Resource Protection (NR)**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Structural Flood Control Projects (SP)**—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Emergency Services (ES)**—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.32-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023- City of Reynoldsburg-001	Repetitive Loss Mitigation	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High
2023- City of Reynoldsburg-002	Flood Vulnerability Evaluation	1	1	0	1	1	1	0	1	1	1	0	1	1	1	11	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023- City of Reynoldsburg-003	Blacklick Creek Stream Restoration	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High
2023- City of Reynoldsburg-004	Flood Mitigation Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023- City of Reynoldsburg-005	Critical Infrastructure Database	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023- City of Reynoldsburg-006	Public Education	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.33 SHARON TOWNSHIP

This section presents the jurisdictional annex for Sharon Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Sharon Township participated in the planning process, an assessment of Sharon Township's risk and vulnerability, the different capabilities used in Sharon Township, and an action plan that will be implemented to achieve a more resilient community.

9.33.1 Hazard Mitigation Planning Team

Sharon Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Sharon Township departments. The Fiscal Officer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.33-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Michael Farley, Fiscal Officer	Name/Title:	Tony Palmer, Trustee
Address:	95 E Wilson Bridge Road Worthington, OH 43085	Address:	95 E Wilson Bridge Road Worthington, OH 43085
Phone Number:	(614) 885-5115 x403	Phone Number:	(614) 885-5115
Email:	fiscalofficer@sharontwp.us	Email:	tpalmer@sharontwp.us
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors			
Name/Title:	No additional contributors		
Method of Participation:			



9.33.2 Municipal Profile

Sharon Township is in the north-center of Franklin County and borders Perry Township, Blendon Township, Clinton Township, and the border with Delaware County. Located 11 miles north of the City of Columbus, Sharon Township is known for its sparse suburban feel, in which most residents live in their own houses. The Township offers many restaurants, coffee shops, and parks. Sharon Township has a total area of 9.0 square miles, 8.8 square miles of land and 0.2 square miles of water.

According to the U.S. Census, the 2020 population for Sharon Township was 17,109, a 7.1 percent increase from the 2010 Census population. Data from the 2020 U.S. Census indicate that 7.2 percent of the population is 5 years of age or younger and 21 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.33.3 Jurisdictional Capability Assessment and Integration

Sharon Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Sharon Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Sharon Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.33-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution – October 11, 2022	Franklin County	Zoning Officer
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations – March 27, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Climate Change Ordinance <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan <i>How does this reduce risk?</i>	No	-	-	-
Capital Improvement Plan <i>How does this reduce risk?</i>	No	-	-	-
Disaster Debris Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Floodplain Management or Watershed Plan <i>How does this reduce risk?</i>	No	-	-	-
Stormwater Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Open Space Plan <i>How does this reduce risk?</i>	No	-	-	-
Urban Water Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Habitat Conservation Plan <i>How does this reduce risk?</i>	No	-	-	-
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> Identifies risks associated with the hazards in the area and how to potentially mitigate those risks.	Yes	Franklin County Risk Assessment	County	Franklin County EMA
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of Sharon Township to oversee and track development.

Table 9.33-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	The Franklin County Economic Development and Planning Department collects Zoning Compliance applications and issues the appropriate certifications. The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits.
If you do not issue development permits, what is your process for tracking new development?	N/A	Coordinate with the Franklin County Building Department.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The Township of Sharon does not track permits; it coordinates with the Franklin County Building Department to maintain its list.
Do you have a buildable land inventory? • If yes, please describe	No	The Franklin County Building Department and/or the Franklin County Economic Development and Planning Department may have an inventory, but the Township of Sharon does not.

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Sharon Township and their current responsibilities that contribute to hazard mitigation.

Table 9.33-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	Sharon Township relies on the Franklin County Planning Commission. The Planning Commission consists of the three Franklin County Commissioners and eight members appointed by the Board of County Commissioners. Three of the eight members are appointed from individuals nominated by the city of Columbus, another three members are appointed from individuals residing in unincorporated Franklin County recommended by townships of the county and the final two members are appointed at the discretion of the Board of County Commissioners with one member residing in unincorporated Franklin County and one member residing in a municipal corporation of the county. The specific powers and duties of the Planning Commission are identified in Section 713.23 of the Ohio Revised Code. The Planning Commission is responsible for reviewing major subdivision and rezoning requests, and for completing Comprehensive Plans for townships in Franklin County.
Zoning Board of Adjustment	No	Sharon Township relies on the Franklin County Board of Zoning Appeals. The Board of Zoning Appeals consists of five members appointed by the Franklin County Board of County Commissioners. Members must reside in the unincorporated area of one of the ten townships with County Zoning. It is a quasi-judicial board that acts on administrative appeals, conditional uses, and variances. It is their duty to maintain the intent and spirit of the zoning district in conformity with the Zoning Resolution. The BZA is responsible for hearing and deciding on three types of applications related to the administration of the Franklin County Zoning Resolution. These include administrative appeals, conditional uses, and variances.
Planning Department	No	Sharon Township relies on the Franklin County Planning and Zoning Department. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County. The Economic Development and Planning Department administers county zoning for ten of the seventeen townships in Franklin County: Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon and Truro Townships.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	Sharon Township relies on the Franklin County Community Development section of the Economic Development & Planning Department. This section is responsible for providing funding and technical assistance to support community development activities and initiatives in Franklin County outside the auspices of the City of Columbus. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County.

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Public Works/Highway Department	Yes	The Road Department provides several services, depending on the time of year. They mow and trim vegetation that interfere with traffic and sight, repair and clean storm sewers, patch pavement, provide leaf collection, and snow removal on township roads. They are also responsible for installing/replacing street signs on township roads as needed. The township currently has approximately 10 miles of roadways to maintain. The maintenance crew takes care of Walnut Grove and Flint Cemeteries as well. This includes mowing, trimming, installing monument foundations, burial openings and closings and selling of grave spaces. The Road Department currently has five full time employees and uses two season employees during the summer months.
Construction/Building/Code Enforcement Department	No	The Franklin County Building Department is the Building Department for Sharon Township. The Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits.
Emergency Management/Public Safety Department	No	The Township of Madison has a Police Department, but not a joint Public Safety Department. Franklin County has an Emergency Management and Homeland Security Department that covers the entire County.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Tornado sirens, Alert Franklin County (Everbridge, requires signup)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The staff at the Road Department have duties which include to mow and trim vegetation that interfere with traffic and sight, repair and clean storm sewers, patch pavement, provide leaf collection, and snow removal on township roads.
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	Franklin County Planning Commission
Engineers or professionals trained in building or infrastructure construction practices	No	Franklin County Building Department
Planners or engineers with an understanding of natural hazards	No	Franklin County Economic Development & Planning Department
Staff with expertise or training in benefit/cost analysis	Yes	The Fiscal Officer in Sharon Township
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	Franklin County has an Emergency Management and Homeland Security Department that covers the entire County.
Grant writer(s)	No	County assist the Township with grants.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
How do your administrative/technical capabilities contribute to risk reduction in your community? The Township of Sharon is reliant on Franklin County for assistance with many of the administrative/technical capabilities. However, this partnership creates a greater understanding of the risks in the community at the County level so various funding opportunities and projects are able to be implemented.		

Fiscal Capability

The table below summarizes financial resources available to Sharon Township.

Table 9.33-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Sharon Township.

Table 9.33-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	There are webpages dedicated to Storm Water Pollution, Public Health, Household Hazardous Waste, Recycling, Public Safety Awareness, and the USGS Water Monitor.
Social media for hazard mitigation education and outreach	Yes	The Township has a Facebook page. The page can be used for hazard mitigation education and outreach.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Tornado sirens, Alert Franklin County (Everbridge, requires signup)
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Social Media (Facebook)

Community Classifications

The table below summarizes classifications for community programs available to Sharon Township.

Table 9.33-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.33-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.33.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP).



The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Sharon Township.

Table 9.33-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Sharon (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Sharon Township.

Table 9.33-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none">Do you maintain a list of properties that have been damaged by flooding?	No
<ul style="list-style-type: none">Do you maintain a list of property owners interested in flood mitigation?How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none">If so, state what projects are underway.	No
<ul style="list-style-type: none">How do you make Substantial Damage determinations?How many were declared for recent flood events in your jurisdiction?	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none">If there are mitigated properties, how were the projects funded?	Do not know many.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none">If not, state why.	No, the most recent map update in 2007 did not include new analysis of streams.
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	Yes
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No

NFIP Topic	Comments
<ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Floodplain management is administered by Franklin County EDP which also administers county zoning and subdivision regulations.

9.33.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.33-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0

Table 9.33-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
There has been no major development or infrastructure from 2018 to present.					
Known or Anticipated Major Development in the Next Five (5) Years					
There are no known or anticipated major development and infrastructure in the next five (5) years.					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.33.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Sharon Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Sharon Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.33-1. Sharon Township Hazard Area Extent and Location Map – Flood

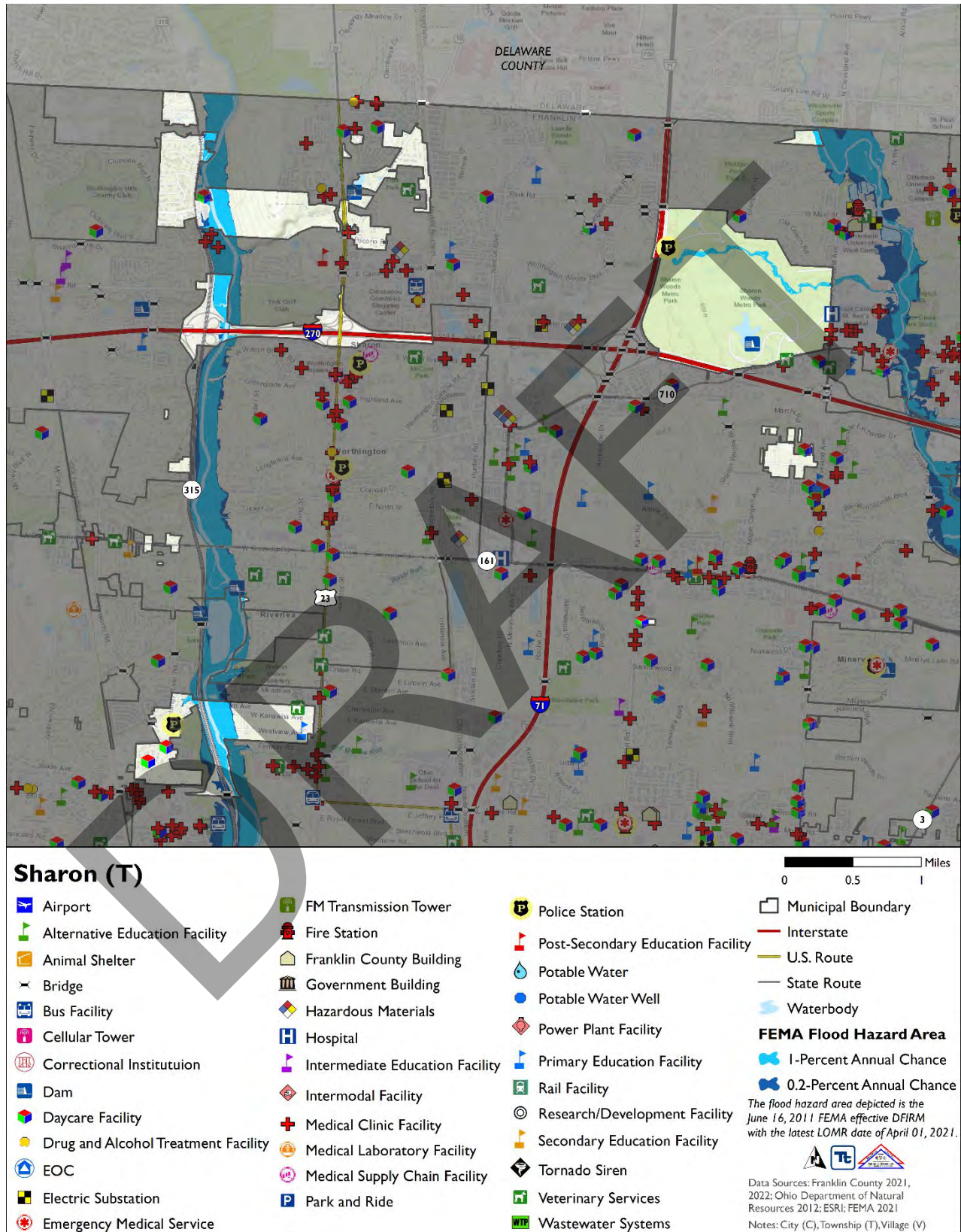


Figure 9.33-2. Sharon Township Hazard Area Extent and Location Map – Land Subsidence

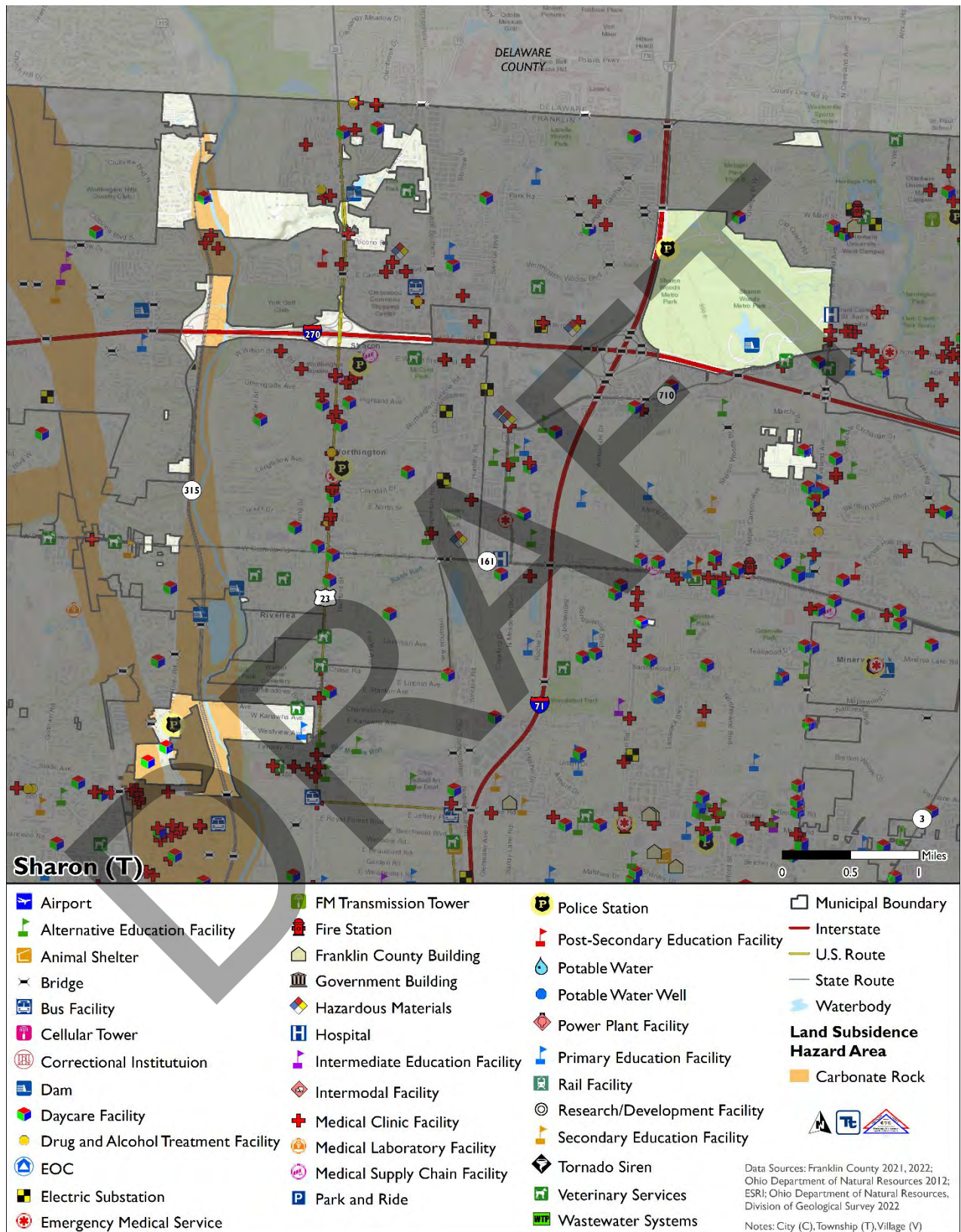
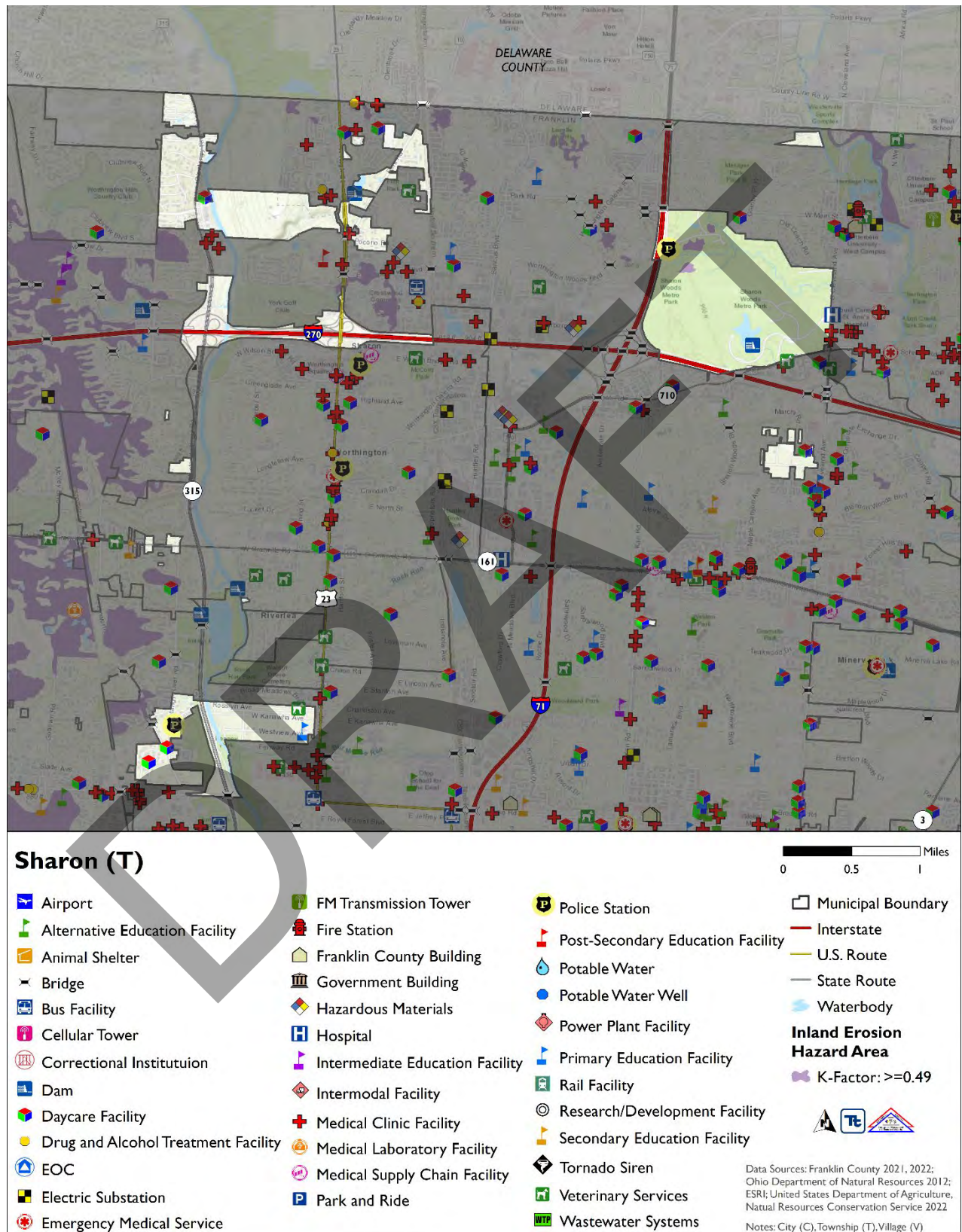


Figure 9.33-3. Sharon Township Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Sharon Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Sharon Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.33-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazard's of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for Sharon Township. Sharon Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Sharon Township indicated that the hazard ranking was appropriate.

Table 9.33-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperatures	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.33-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Sharon Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	3	2
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	2	2

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Sharon Township identified the following vulnerabilities within its community:

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- Local roadways become inundated with flood waters during heavy rainfalls.
- The Township does not have a centralized way to notify residents of potential hazards and problem areas.



9.33.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation action, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The 2018 Franklin County HMP did not identify mitigation actions for Sharon Township, therefore no actions are displayed in the table below.

DRAFT

Table 9.33-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
-	-	-	-	-	-

DRAFT

Additional Mitigation Efforts

Sharon Township did not identify any additional mitigation efforts completed since the last HMP.

Since the adoption of the County's first HMP, Sharon Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.33-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	-	-	-	X	-	-	X	-	-	X
Disease Outbreak	-	-	-	X	-	-	X	-	-	X
Drought	-	-	-	X	-	-	X	-	-	X
Earthquake	-	-	-	X	-	-	X	-	-	X
Extreme Temperatures	-	-	-	X	-	-	X	-	-	X
Flood	-	X	-	X	X	-	X	-	-	X
Geologic	-	-	-	X	-	-	X	-	-	X
Invasive Species	-	-	-	X	-	-	X	-	-	X
Severe Summer Weather	-	X	-	X	X	-	X	-	-	X
Severe Winter Weather	-	-	-	X	-	-	X	-	-	X
Tornadoes	-	-	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.34-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the specific mitigation action Sharon Township would like to pursue in the future to reduce the effects of hazards. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.33-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Sharon-01	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: Work with Franklin County EM&HS to provide residents of Sharon Township with the necessary information to protect themselves and understand the threats of all hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS, Sharon Township Administration	HMGP, Local Funds	High	Low	High	EAP	PI
2023-Sharon-02	Storm Maintenance Program Update	<p>Problem: Local roadways become inundated with flood waters during heavy rainfalls.</p> <p>Solution: Update stormwater maintenance program to include maintenance activities prior to an upcoming storm.</p>	Flood, Severe Summer Weather	3, 6	1 year	Sharon Township Public Works	Local Funds	High	Low	High	SIP	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Sharon-03	Alert Franklin County Campaign	<p>Problem: The Township does not have a centralized way to notify residents of potential hazards and problem areas.</p> <p>Solution: Partner with Franklin County EM&HS, to promote the ALERT Franklin system so residents can stay informed and aware of any impending hazards.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	4, 5	2 years	Franklin County EM&HS, Sharon Township Administration	HMGP, Local Funds	High	Low	High	EAP	ES

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.33-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Jefferson-005	All Hazards Public Outreach Campaign	1	1	1	1	1	1	1	0	0	0	1	1	1	0	10	High
2023-Madison-03	Storm Maintenance Program Updates	0	0	1	1	1	1	1	1	1	1	1	1	1	0	11	High
2023-Jefferson-007	Alert Franklin County Campaign	1	0	1	1	1	1	1	0	0	1	1	1	1	0	10	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.34 TRURO TOWNSHIP

This section presents the jurisdictional annex for Truro Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Truro Township participated in the planning process, an assessment of Truro Township's risk and vulnerability, the different capabilities used in Truro Township, and an action plan that will be implemented to achieve a more resilient community.

9.34.1 Hazard Mitigation Planning Team

Truro Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.34-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Jason W. Nicodemus, Township Administrator	Name/Title:	Jeff Sharps, Fire Chief
Address:	6900 E. Main Street, Reynoldsburg, OH 43068	Address:	6900 E. Main Street, Reynoldsburg OH 43068
Phone Number:	(614) 866-1317	Phone Number:	(614) 729-1901
Email:	jnicodemus@trurotwp.org	Email:	chiefsharps@trurotwp.org
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.34.2 Municipal Profile

The Truro Township is located along the eastern side of Franklin County and is bordered by Jefferson and Mifflin Township to the north, Montgomery Township to the west, Madison Township to the south and Licking County borders the Township to the east. Most of what was once Truro Township has been annexed by the cities of Reynoldsburg, in the east, and Columbus everywhere else, although the village of Brice is located in southern Truro Township, and several small unincorporated portions remain. A prominent creek that flows through the Truro is Blacklick Creek, which has a few different tributaries that covers most of east Truro Township.

According to the American Community Survey, the 2021 population for Truro Township was 30,165, a 12.4 percent increase from the 2010 Census population of 26,837. Data from the 2021 American Community Survey indicates that 7.1 percent of the population is 5 years of age or younger and 14.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.34.3 Jurisdictional Capability Assessment and Integration

Truro Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Truro Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Truro Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.34-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution – October 11, 2022	County	Zoning Officer
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations – March 27, 2012	County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Franklin County Stormwater Drainage Manual – March 13, 2012	County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Franklin County's Flood Damage Reduction Regulation – September 19, 2007	County	Franklin County Floodplain Administrator
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Provides a vision that achieves the goals of preparing for future growth while protecting the desires of the community; enhancing the quality of life for Truro Township residents; and ensuring that the community is safe and well cared for.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	County	Stormwater Executive Committee
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: <ol style="list-style-type: none"> 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. 				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of Truro Township to oversee and track development.

Table 9.34-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Truro Township does not provide zoning services nor issue building permits. These services are provided by either the City of Reynoldsburg or Franklin County.
If you do not issue development permits, what is your process for tracking new development?	N/A	There is no process. The Township relies on the City of Reynoldsburg or Franklin County to track new development.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	The building permit application asks for floodplain information so it can be applied to building code requirements if needed. Franklin County Development issues floodplain permits in Truro Township. The permits issued by Franklin County are sent to various departments for review, depending on the nature of the work. If any issues arise, it is noted and discussed.
Do you have a buildable land inventory? • If yes, please describe	No	The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage.
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Truro Township and their current responsibilities that contribute to hazard mitigation.

Table 9.34-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Roads Department currently maintains 3.625 miles of roads in the Township, which consists of: <ul style="list-style-type: none"> • Snow Removal • Road Repairs • Storm water drainage • Road signage • Trimming of trees and cleanup of fallen trees • Litter, bulk trash, and dead animal removal from road rights-of-way <ul style="list-style-type: none"> • Mowing of roadside, etc. • Maintenance Technician – 1 staff (full-time)
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	Truro Township Fire Department serves Reynoldsburg, Brice, and Truro Township. Fire/EMS Department – 44 staff (full-time)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		Truro Township does not provide police services. These services are provided by either the City of Reynoldsburg or Franklin County.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to Truro Township.

Table 9.34-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Truro Township.

Table 9.34-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Information on stormwater management
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to Truro Township.

Table 9.34-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.34-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.34.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Truro Township.

Table 9.34-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Truro (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Truro Township.

Table 9.34-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No

NFIP Topic	Comments
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction?	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigated properties, how were the projects funded?	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	No, the most recent map update in 2007 did not include new analysis of streams.
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended?	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.34.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.34-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.34-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

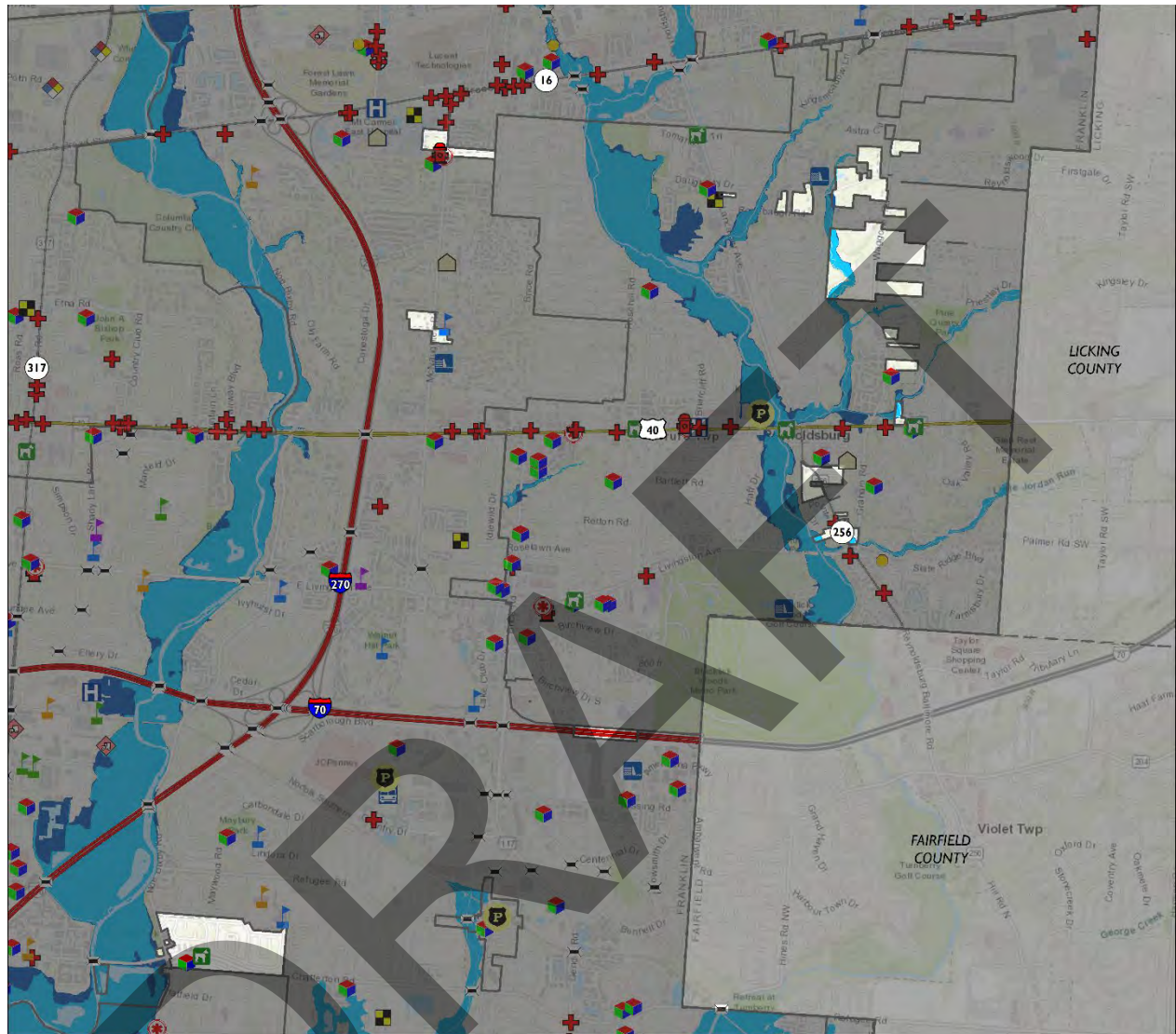
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.34.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Truro Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Truro Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.34-1. Truro Township Hazard Area Extent and Location Map – Flood



Truro (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

FEMA Flood Hazard Area

1-Percent Annual Chance
 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.



Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021

Notes: City (C), Township (T), Village (V)

Figure 9.34-2. Truro Township Hazard Area Extent and Location Map – Land Subsidence

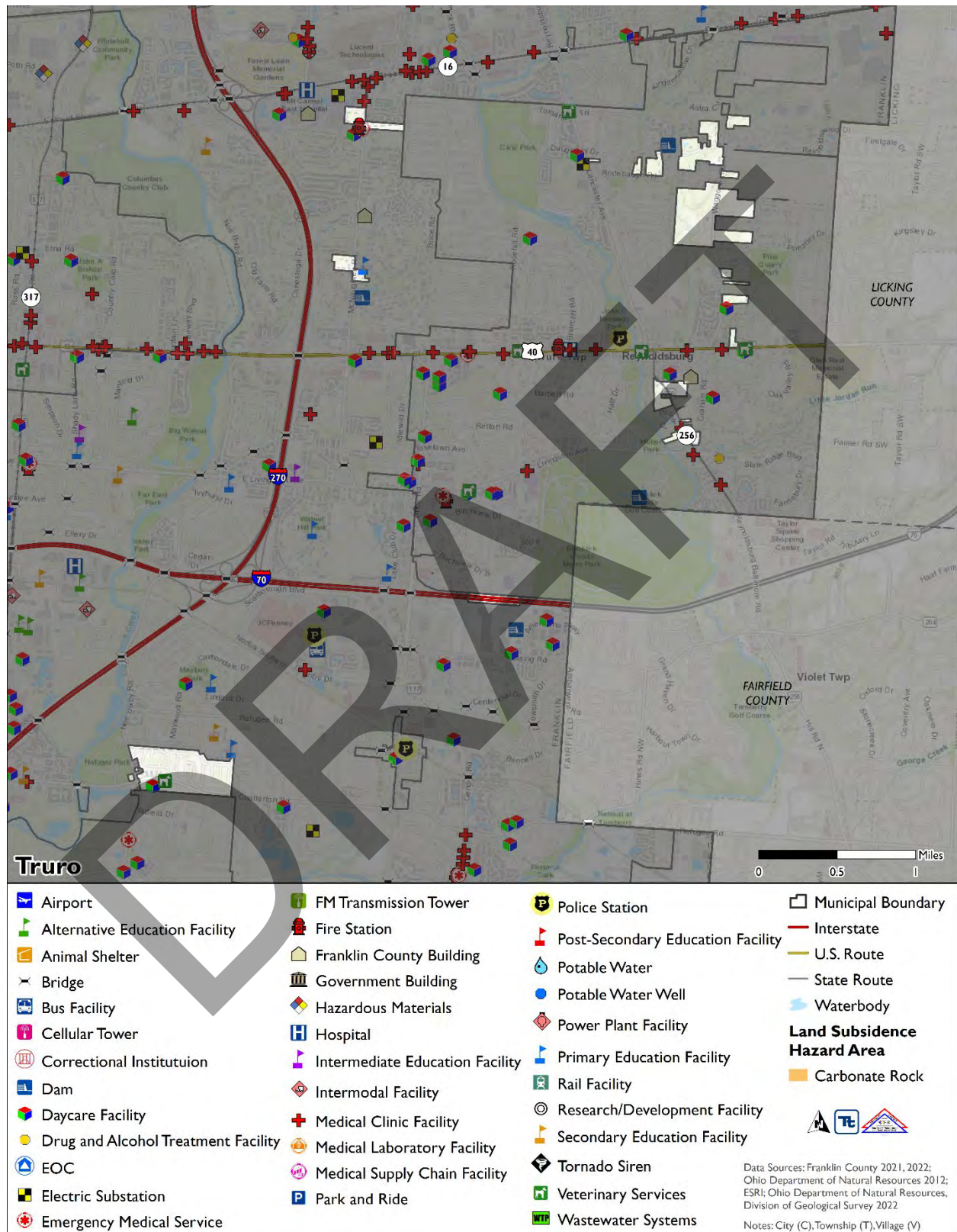
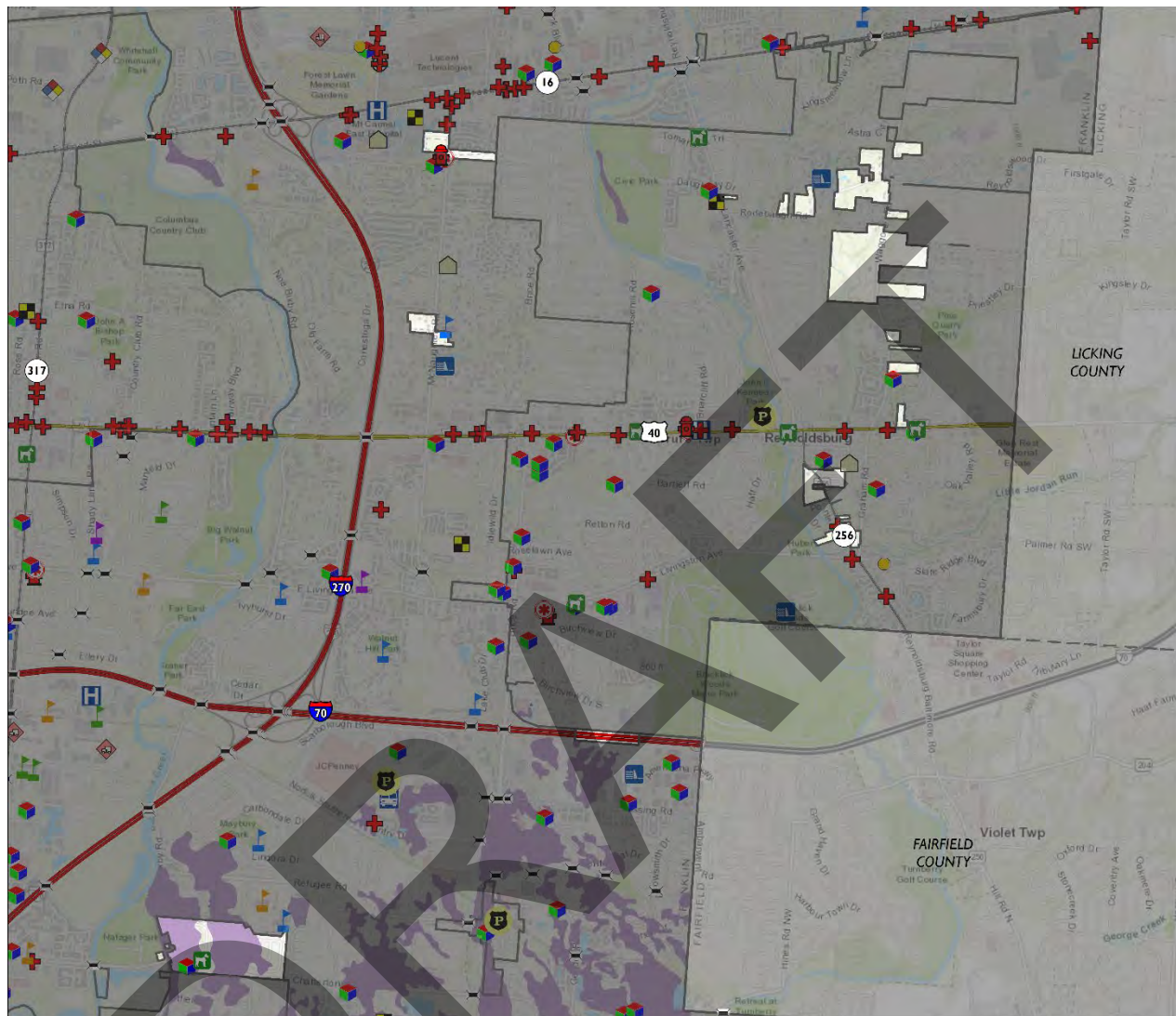


Figure 9.34-3. Truro Township Hazard Area Extent and Location Map – Inland Erosion



Truro (T)

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | Tetra Tech |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Truro Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Truro Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.34-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	Although the County was impacted, the Township did not report damages.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Although the County was impacted, the Township did not report damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Although the County was impacted, the Township did not report damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths were reported in the County.	The Township was subject to closures and masking/social distancing requirements.
August 17, 2021	Flash Flooding	N/A	Heavy rains, 4.5" + in hour and half, from remnants of Tropical Depression Fred, developed over the city of Reynoldsburg. Caused substantial street flooding in Reynoldsburg.	No known damages/losses to Truro Township. Township Fire and EMS Department responded to numerous calls and alarms.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community

capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Truro Township. Truro Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Truro Township indicated the preliminary hazard rankings were appropriate for the jurisdiction.

Table 9.34-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.34-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Truro Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	1	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Truro Township identified the following vulnerabilities within its community:

- Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Village.
- The Township does not have a Comprehensive Plan developed that integrates the current HMP into regulations and limitations.

9.34.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.34-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Extreme heat - Fan collection/distribution program for senior population	Township Trustees office	Ongoing Capability. Project is conducted yearly. Public donates fans to fire department for distribution	No	-	-
Seek funding for public information including outreach projects and technical assistance to property owners. (5000 / 1 year)	Township Trustee's office	In Progress	Yes	Public Educational Opportunities	Township Trustee's Office

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Truro Township identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Truro Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Truro Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.34-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	X	-	X	-	-	-
Disease Outbreak	X	-	-	X	X	-	X	-	-	-
Drought	X	-	-	X	X	-	X	-	-	-
Earthquake	X	-	-	X	X	-	X	-	-	-
Extreme Temp	X	-	-	X	X	-	X	-	-	-
Flood	X	-	-	X	X	-	X	-	-	-
Geologic	X	-	-	X	X	-	X	-	-	-
Invasive Species	X	-	-	X	X	-	X	-	-	-
Severe Summer Weather	X	-	-	X	X	-	X	-	-	-
Severe Winter Weather	X	-	-	X	X	-	X	-	-	-
Tornado	X	-	-	X	X	-	X	-	-	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.35-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Truro Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.34-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Truro Township-001	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Village.</p> <p>Solution: Work with Franklin County EM&HS to provide residents with the necessary information to understand the threats of all hazards and protect themselves and their property.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS and Township Trustee's Office	HMGP, Local Funds	The Township residents will be better educated.	Low	High	EAP	PI
2023-Truro Township-002	Comprehensive Plan Development	<p>Problem: The Township does not have a Comprehensive Plan developed that integrates the current HMP into regulations and limitations.</p> <p>Solution: The Township will develop a Comprehensive Plan that integrates the HMP to guide development based on hazard area and problem areas. This plan will also address invasive species areas and will identify potential vaccination sites and shelters.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	1, 6	1 Year	Township Administration	Local Funds	The Township will have a plan to guide growth and development that integrates the HMP.	Staff Time	High	LPR	PR



**Mitigation initiative is related to a critical facility and/or community lifeline*

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.*

CRS Category:

- *Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.34-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Truro Township-001	All-Hazards Education Campaign	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
2023-Truro Township-002	Comprehensive Plan Development	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.35 CITY OF UPPER ARLINGTON

This section presents the jurisdictional annex for the City of Upper Arlington that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Upper Arlington participated in the planning process, an assessment of the City of Upper Arlington's risk and vulnerability, the different capabilities used in the City of Upper Arlington, and an action plan that will be implemented to achieve a more resilient community.

9.35.1 Hazard Mitigation Planning Team

The City of Upper Arlington identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Upper Arlington departments, including the Fire Department, City Manager, and City Planning. The Assistant Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.35-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Chris Zimmer/Assistant Fire Chief	Name/Title:	Jackie Thiel/Assistant City Manager
Address:	3600 Tremont Rd. Upper Arlington OH 43221	Address:	3600 Tremont Rd. Upper Arlington OH 43221
Phone Number:	614-583-5000	Phone Number:	614-583-5000
Email:	czimmer@uaoh.net	Email:	jthiel@uaoh.net
NFIP Floodplain Administrator			
Name/Title:	Justin Milam, Planning Officer		
Address:	3600 Tremont Road, Upper Arlington, OH 43221		
Phone Number:	614-583-5083		
Email:	-		
Additional Contributors:			
Name/Title:	Alyssa Kelly/Planning Officer		

Method of Participation:	Provided key input throughout the planning process
Name/Title:	Aaron Scott P.E/Assistant City Engineer
Method of Participation:	Provided key input throughout the planning process

9.35.2 Municipal Profile

The City of Upper Arlington is in the northwest area of Franklin County. Upper Arlington is bordered on the west by the Scioto River, on the north and east by Columbus, and on the south by Marble Cliff and Grandview Heights. The Olentangy River and the main campus of the Ohio State University are a short distance to the east of Upper Arlington.

According to the American Community Survey, the 2021 population for the City was 36,566, a 8.28 percent increase from the 2010 Census population of 33,771. Data from the 2021 American Community Survey indicates that 8.4 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.35.3 Jurisdictional Capability Assessment and Integration

The City of Upper Arlington performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Upper Arlington to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Upper Arlington and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.35-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part 13 – Building Code	Local, State	Community Development
<i>How does this reduce risk?</i> All new buildings and structures must comply with state and local codes. This reduces risk to healthy, safety and welfare of community members.				
Zoning/Land Use Code	Yes	Part 11 – Unified Development Ordinance	Local	Community Development
<i>How does this reduce risk?</i> The zoning code establishes dimensional, use, and performance standards for development to ensure that development is compatible with the area and that areas are not overdeveloped. Additional standards are required to develop in a floodplain.				
Subdivision Ordinance	Yes	Part 11 – Unified Development Ordinance	Local	Community Development
<i>How does this reduce risk?</i> The subdivision regulations require detailed information on existing geographic features and how an area will be developed, including access, utilities, and drainage, to mitigate risk. Additional standards are required to develop in a floodplain.				
Site Plan Ordinance	Yes	Part 11 – Unified Development Ordinance	Local	Community Development
<i>How does this reduce risk?</i> The site plan regulations require detailed information on existing geographic features and how a site will be developed.				
Stormwater Management Ordinance	Yes	Part 11 – Unified Development Ordinance	Local	Public Service
<i>How does this reduce risk?</i> The utility shall monitor the design, operation, maintenance, inspection and construction of all stormwater systems in the city. The utility shall be responsible for the design and construction of public stormwater systems in the city and shall inspect, operate and maintain them.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Part 11, 6.05 – Floodplain Design Standards	Local	Community Development
<i>How does this reduce risk?</i> The ordinance discourages or prohibits development within flood hazard areas.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Historic Preservation Ordinance	Local	Community Development
Planning Documents				
Comprehensive/Master Plan	Yes	City of Upper Arlington Master Plan	Local	Community Development
<i>How does this reduce risk?</i> The City's Master Plan encourages growth in existing commercial areas that are already developed and provide the appropriate location for additional growth and development. The City's maps identify 100-year floodplain zones to avoid.				
Capital Improvement Plan	Yes	Upper Arlington CIP	Local	Engineering
<i>How does this reduce risk?</i> The City is able to plan for large budget expenditures to make sure roadways, utilities, parks, etc. are maintained for the future.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Stormwater Management Plan	Local	Public Service
<i>How does this reduce risk?</i> This helps the City plan for and mitigate potential stormwater or flooding issues.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	Yes	Economic Development Blueprint	Local	Economic Development
<i>How does this reduce risk?</i> The Economic Development Plan encourages development/redevelopment in key corridors and aims to attract and retain businesses. This focuses investment where development has already occurred and modernizes sites and buildings, reducing risk during hazardous events.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	Yes	Transportation Plan	Local	Public Service
<i>How does this reduce risk?</i> This ensures City facilities are adequate for growth and for emergency situations.				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Climate Action/ Resiliency/Sustainability Plan	Yes	Sustainability Agenda	Local	Green Team
<i>How does this reduce risk?</i> The City's Sustainability Agenda identifies objectives and strategies to reducing waste, pollution, and emissions and increasing social, economic, and environmental resiliency in the City.				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i> Consider the following: <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? 				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	Yes	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	Yes	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Upper Arlington to oversee and track development.

Table 9.35-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? 	Yes	All permits relating to construction- building, trade, planning, etc.

Indicate if your jurisdiction implements the following	Yes/No	Comment:
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	The City is entirely built out.
Describe the level of build-out in your jurisdiction.	N/A	Upper Arlington is an inner-ring, fully built-out suburb.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Upper Arlington and their current responsibilities that contribute to hazard mitigation.

Table 9.35-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Board of Zoning and Planning
Zoning Board of Adjustment	Yes	Board of Zoning and Planning
Planning Department	Yes	Community Development
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Tree Commission, UA Green Team
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Community Improvement Corporation
Public Works/Highway Department	Yes	Public Works
Construction/Building/Code Enforcement Department	Yes	Community Development
Emergency Management/Public Safety Department	Yes	Public Works, Police and Fire
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Public Works, Police and Fire
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Parks & Recreation Department
Mutual aid agreements	Yes	-
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	-
Planners or engineers with an understanding of natural hazards	Yes	-
Staff with expertise or training in benefit/cost analysis	Yes	-
Professionals trained in conducting damage assessments	Yes	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Professional Engineers on Staff.

Fiscal Capability

The table below summarizes financial resources available to the City of Upper Arlington.

Table 9.35-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Upper Arlington.

Table 9.35-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	-
Personnel skilled or trained in website development	Yes	-
Hazard mitigation information available on your website	Yes	-
Social media for hazard mitigation education and outreach	Yes	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	-
Warning systems for hazard events	Yes	-
Natural disaster/safety programs in place for schools	Yes	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Social media and e-newsletters

Community Classifications

The table below summarizes classifications for community programs available to the City of Upper Arlington.

Table 9.35-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	4	9/10/2019
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.35-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.35.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP).



The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Upper Arlington.

Table 9.35-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Upper Arlington (C)	39	49	\$204,904.19	3	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Upper Arlington.

Table 9.35-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	No
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	N/A
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes, but are possibly too liberal
NFIP Compliance	
What local department is responsible for floodplain management?	Engineering Division, Planning Division

NFIP Topic	Comments
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, GIS
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Increase of >20% of GFA
What are the barriers to running an effective NFIP program in the community, if any?	Property surveying, changes in streambank
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	UDO Article 6.05 12-14-2015
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meet
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Flood Plain Permit reviewed by Planning and Engineering Divisions
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	n/a

9.35.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.35-11. Number of Building Permits for New Construction Since the Previous HMP

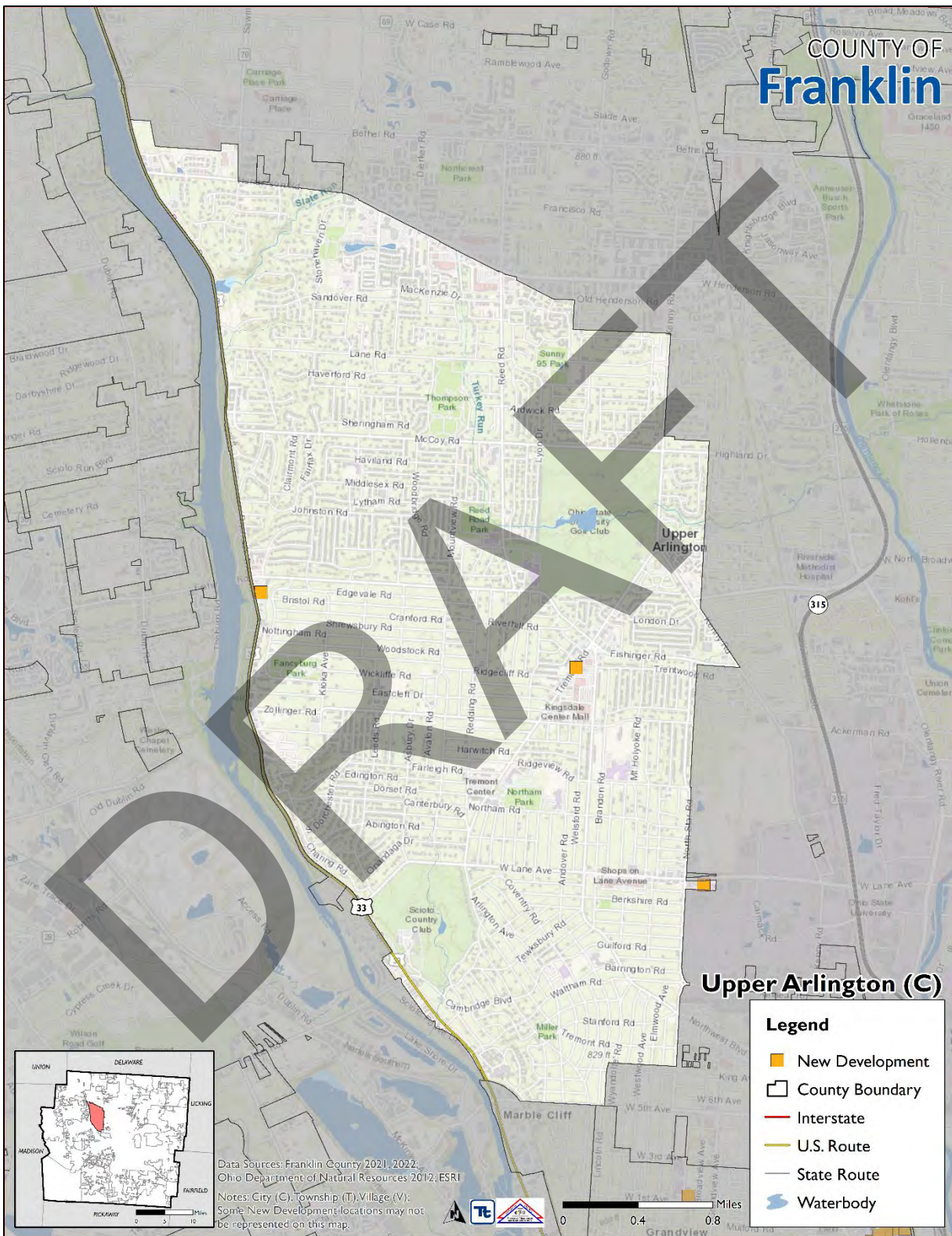
Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	47	0	25	0	35	0	19	0	27	0
Multi-Family	0	0	0	0	0	0	1	0	0	0
Other (commercial, mixed-use, etc.)	4	0	11	0	1	0	7	0	11	0
Total Permits Issued	51	0	36	0	36	0	27	0	38	0

Table 9.35-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Westmont at the Lane	Mixed-use	133	1600 W. Lane Ave	n/a	Open
Arlington Gateway	Mixed-use	97	1325 W. Lane Ave	n/a	Under Construction
Kingsdale	Mixed-use	467	3220 Tremont Rd	n/a	Under Construction
Known or Anticipated Major Development in the Next Five (5) Years					
Golden Bear	Mixed-use	79	3700 Riverside Dr	n/a	Pending

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.35-1. City of Upper Arlington New Development Map



9.35.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Upper Arlington's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Upper Arlington has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.35-2. City of Upper Arlington Hazard Area Extent and Location Map-Flood

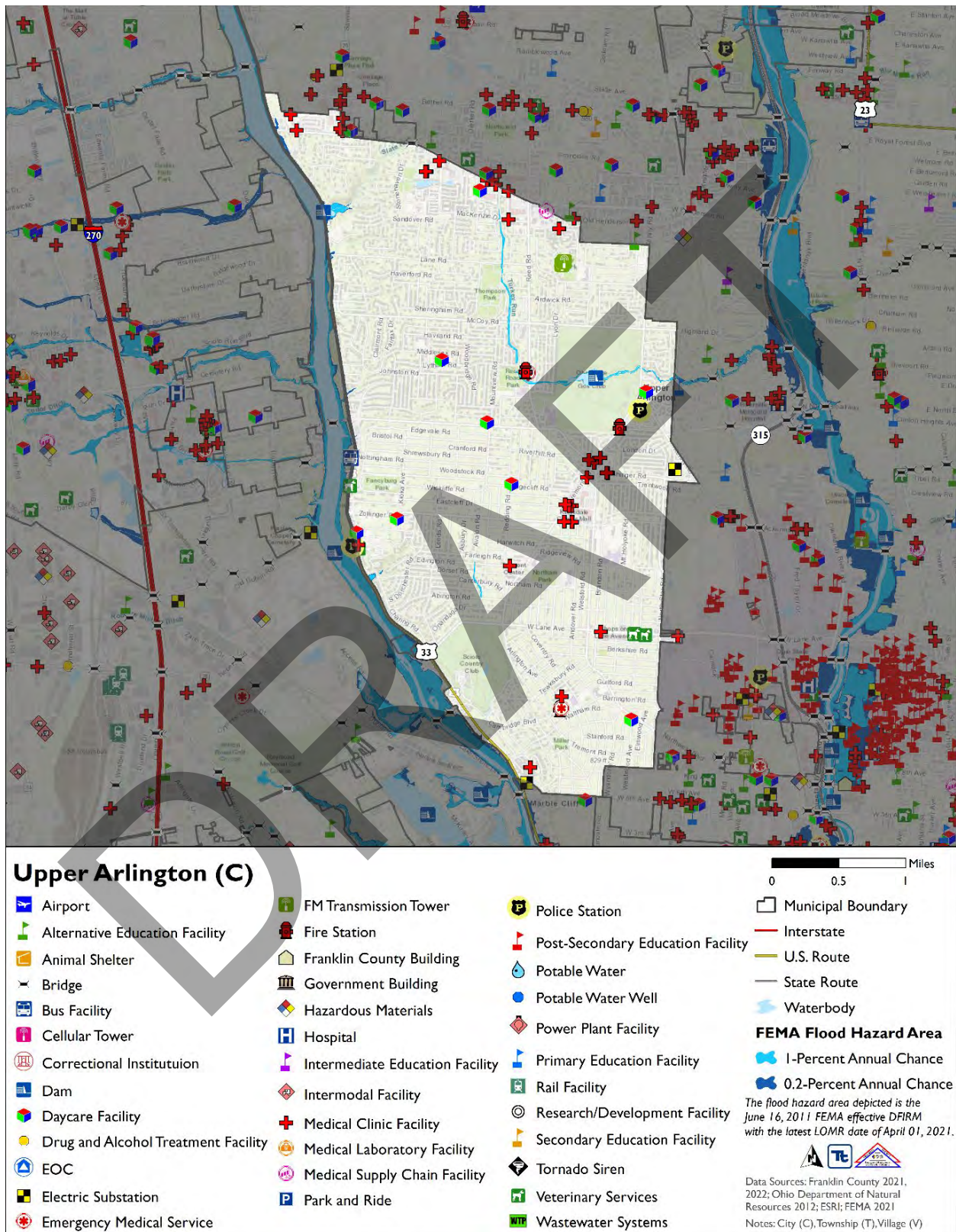


Figure 9.35-3. City of Upper Arlington Hazard Area Extent and Location Map-Inland Erosion

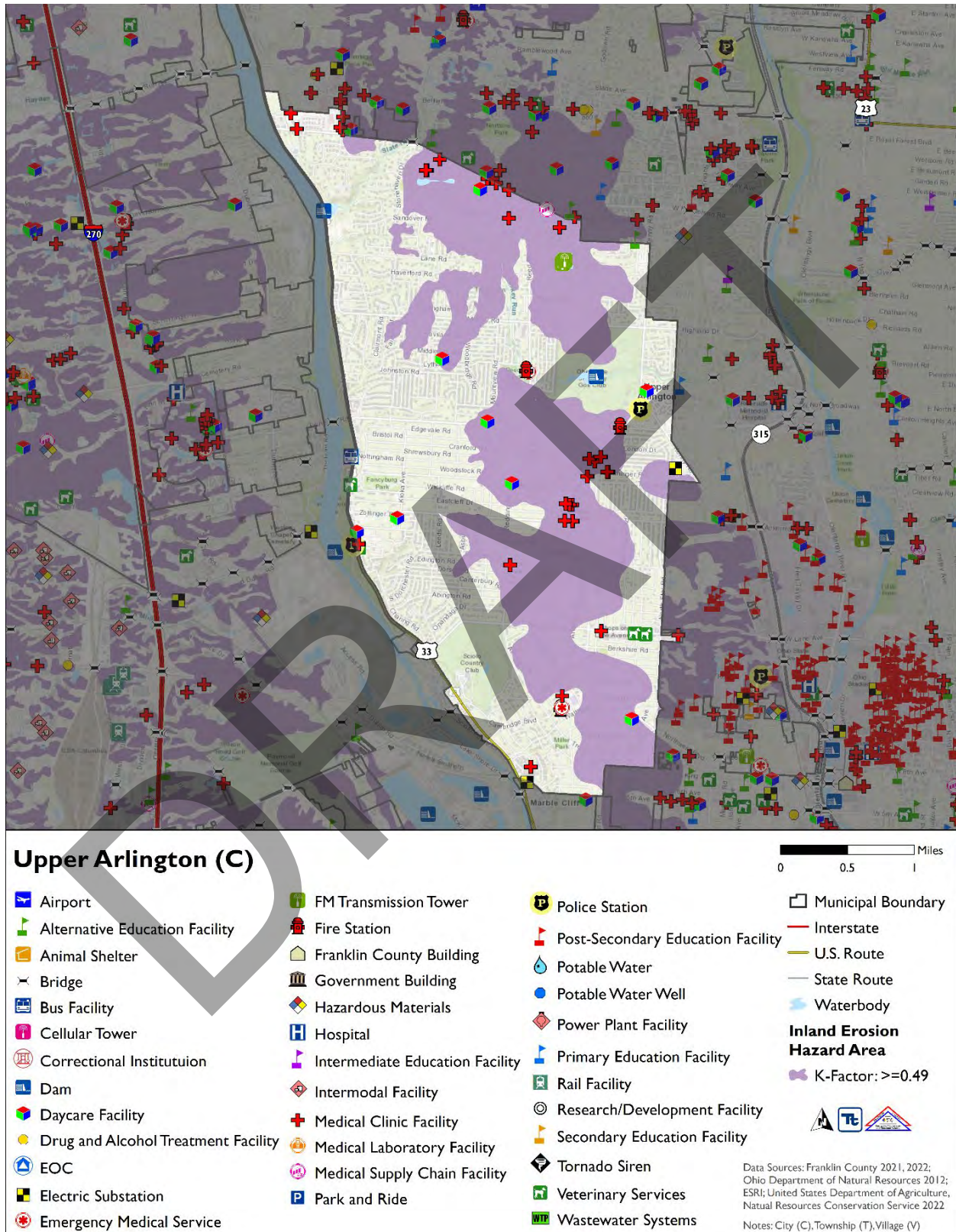
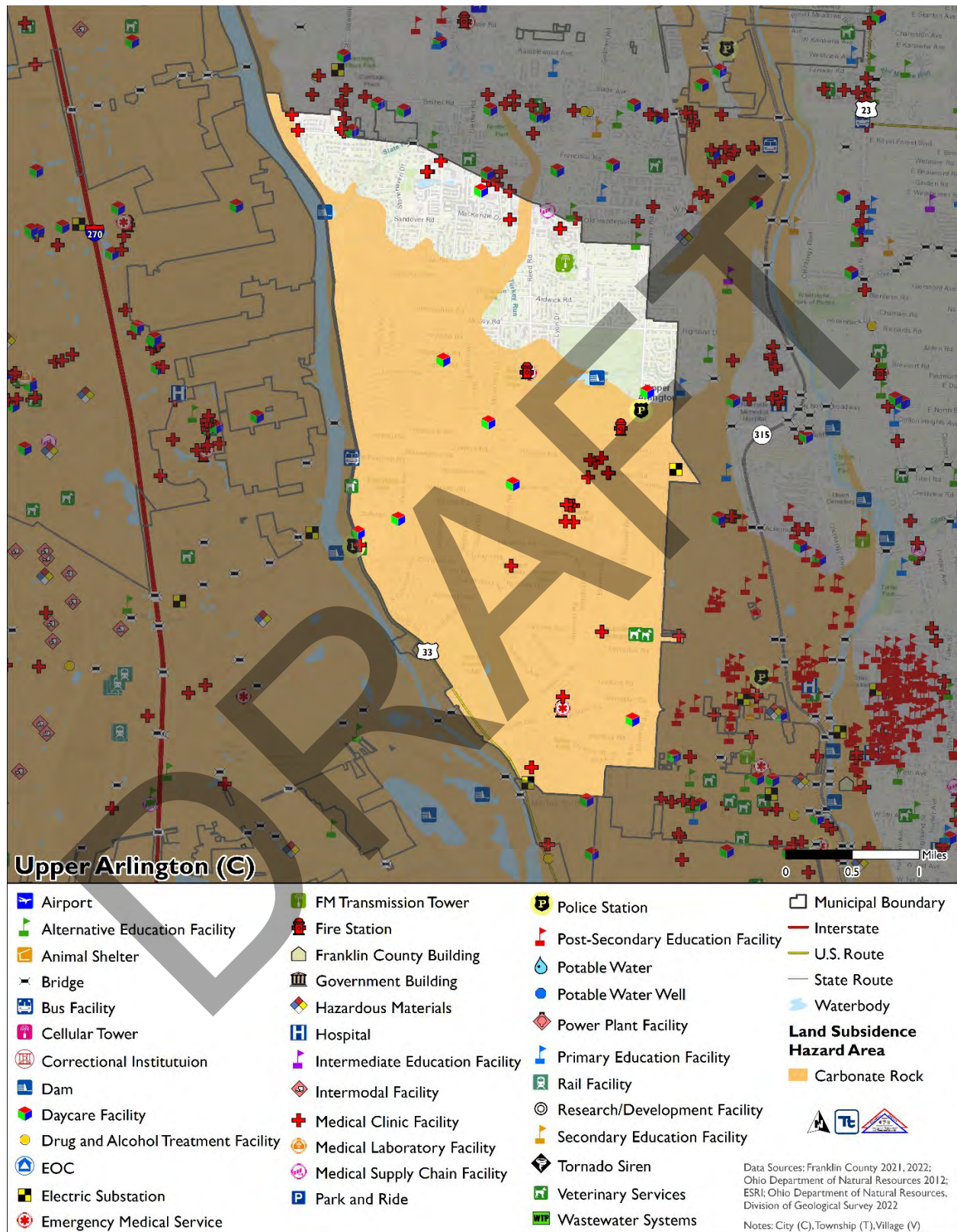


Figure 9.35-4. City of Upper Arlington Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The City of Upper Arlington's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Upper Arlington experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.35-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde City neighborhood of Columbus. Approximately \$750,000 in property damage.	While this event impacted parts of Franklin County, the City did not identify any damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	While this event impacted parts of Franklin County, the City did not identify any damages or losses from this event.
June 2022	Wide-spread power outages	N/A	Rolling, persistent blackouts related to derecho windstorms that occurred in Ohio.	\$2,200 (OT)
March 2020-present	COVID-19 Pandemic	Yes	Global pandemic (SARS-CoV-2 virus)	While this event impacted parts of Franklin County, the City did not identify any damages or losses from this event.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each

municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Upper Arlington. The City of Upper Arlington reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.35-14. Hazard Ranking Input

Hazard	Rankings
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic (Erosion)	Low
Geologic (Land Subsidence)	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.35-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Upper Arlington

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	1
0.2-Percent Annual Chance Flood Event Hazard Area	1	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	35	30
Subsidence (Karst/Carbonate Rock) Hazard Area	45	39
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Upper Arlington identified the following vulnerabilities within its community:

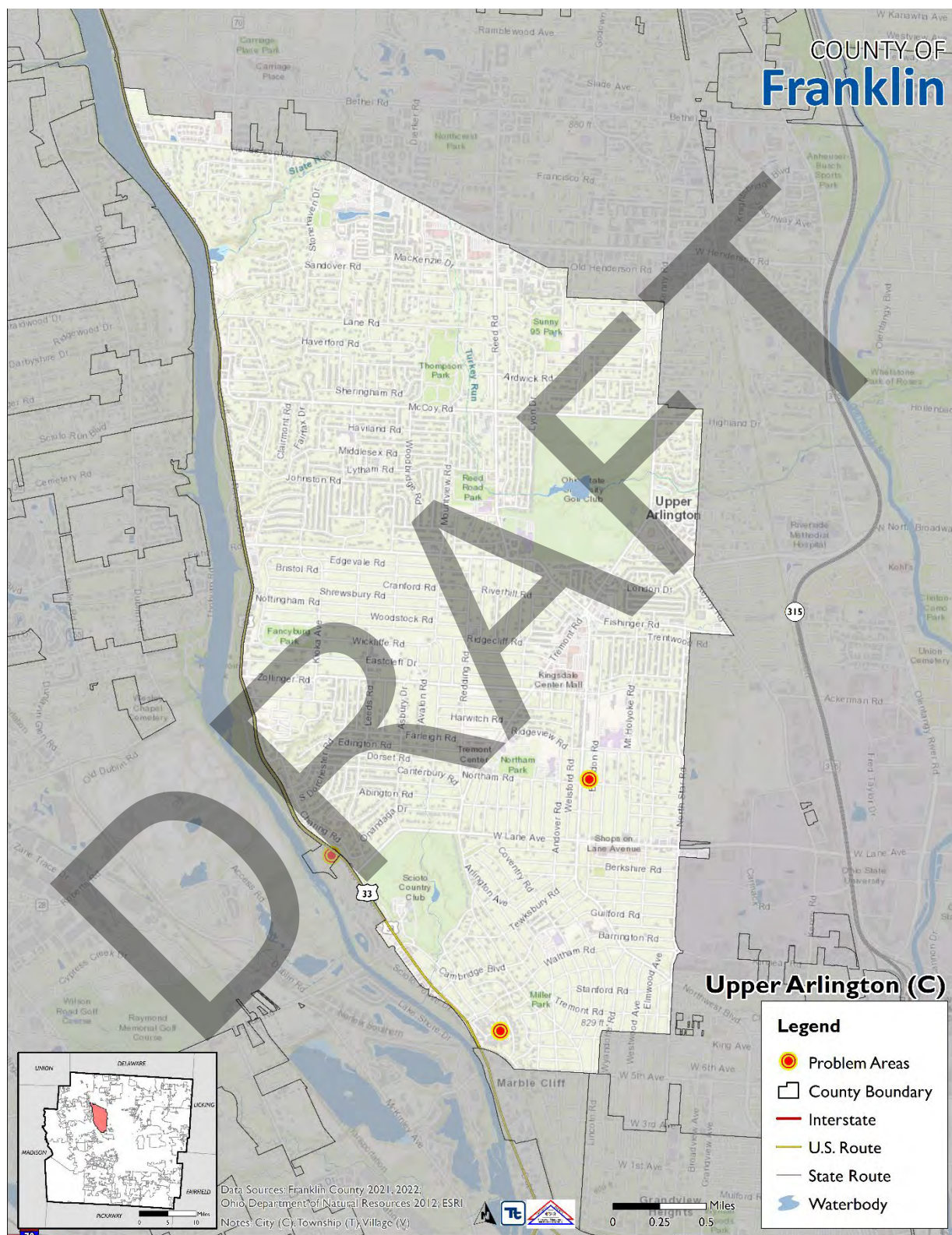
- Upper Arlington has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- There are numerous reports of flooding issues throughout the City including numerous storm grates and properties. *

- The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events. *
- City residents are unaware of how to prepare and mitigate hazards as well as how hazards are being exacerbated by climate change. *
- The City needs to be able to operate and run during power outages, however, some buildings do not have backup power equipped to help them perform continuity of operations.
- The City has an increased need for PPE during a disease outbreak/pandemic, Past history has shown how quickly current stock can be depleted and normal supply routes disrupted. Also, proper PPE is necessary to protect our first responders and keep them well healthy and operational.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

DRAFT

Figure 9.35-5. City of Upper Arlington Problem Area Map





9.35.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.35-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding for repetitive loss structures within the jurisdiction to permanently reduce damages to these structures. (4 known properties est. at 450,000 /4 years)	Mayor's Office	No Progress	No	-	-

DRAFT

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Upper Arlington identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Upper Arlington has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.35-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	X	-	X	X	-	X	-	X	-
Disease Outbreak	X	X	-	X	X	-	X	-	X	-
Drought	-	X	-	X	-	-	X	-	X	-
Earthquake	-	X	-	X	X	-	X	-	X	-
Extreme Temp	-	X	-	X	X	-	X	-	X	-
Flood	-	X	-	X	-	-	X	-	X	-
Geologic (Erosion)	-	X	-	X	-	-	X	-	X	-
Geologic (Land Subsidence)	-	X	-	X	-	-	X	-	X	-
Invasive Species	-	X	-	X	X	-	X	-	X	-
Severe Summer Weather	-	X	-	X	X	-	X	-	X	-
Severe Winter Weather	-	X	-	X	X	-	X	-	X	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.36-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Upper Arlington will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.35-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Upper Arlington-001	Repetitive Loss Mitigation	<p>Problem: Upper Arlington has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	The Repetitive loss structures will no longer flood as frequently.	>\$100,000 per property	High	SIP	SP
2023-City of Upper Arlington-002	City Wide Flood Study and Infrastructure Fix	<p>Problem: There are numerous reports of flooding issues throughout the City including numerous storm grates and properties.</p> <p>Solution: The City will implement a City-wide flood study to determine what is creating the flooding issues throughout</p>	Flood	2,6	Less than 5 Years	Floodplain Administrator	FMA, BRIC, CDBG, HMGP	The City will have reduced flooding issues.	TBD after Study	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		the entire City. Once causes of flooding are determined, cost effective solutions will be implemented to reduce issues.										
2023-City of Upper Arlington-003	Utility Wires	<p>Problem: The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events.</p> <p>Solution: The City will conduct a study to determine if it is feasible to move utility wires underground to prevent hazard events from knocking them down. Once feasibility is determined, the City will implement a process to start moving wires underground.</p>	Dam/Levee, Earthquake, Extreme Temp, Severe Summer Weather, Severe Winter Weather, Tornado	2,6	Less than 5 Years	Department of Public Works	CDBG, HMGP, BRIC, City Budget	The City will experience less connection and power issues.	TBD after Study	High	SIP	SP, PR
2023-City of Upper Arlington-004	Climate Change Education	<p>Problem: City residents are unaware of how to prepare and mitigate hazards as well as how hazards are being exacerbated by climate change.</p> <p>Solution: The City will create a spot on their website detailing how to prepare and mitigate hazards and will also detail climate change information so that residents can be prepared for how hazards may intensify. The City will also distribute this information in the form of a brochure to distribute to shelters and the homeless population.</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado	5	Less than a year	Administration	City Budget	City residents will become more educated on the hazards of concern.	Staff time	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Upper Arlington-005	Generator Study	<p>Problem: The City needs to be able to operate and run during power outages, however, some buildings do not have backup power equipped to help them perform continuity of operations.</p> <p>Solution: The City will create an inventory of buildings that need a backup generator so that they may perform continuity of operations during power outages. Once this is complete, the City will conduct generator studies to determine what size generator each building needs and will implement them.</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado	6	Less than 5 years	Administration, Engineer	FMA, BRIC, HMGP, CDBG	The City will be able to perform continuity of operation.	TBD after engineer study	High	SIP	SP
2023-City of Upper Arlington-006	PPE	<p>Problem: The City has an increased need for PPE during a disease outbreak/pandemic. Past history has shown how quickly current stock can be depleted and normal supply routes disrupted. Also, proper PPE is necessary to protect our first responders and keep them well healthy and operational.</p> <p>Solution: The City will obtain, properly store and distribute PPE for emergency workers in the event of a disease outbreak.</p>	Disease Outbreak	2	Less than 2 years	Administration	HMGP, City Budget	Having enough PPE on hand will help to protect first responders and allow them to remain operational and respond to the needs of the public that will be increased during a	Unknown	High	LPR	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
								disease outbreak/pandemic event				

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.35-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Upper Arlington-001	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2023-City of Upper Arlington-002	City Wide Flood Study and Infrastructure Fix	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2023-City of Upper Arlington-003	Utility Wires	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Upper Arlington-004	Climate Change Education	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-City of Upper Arlington-005	Generator Study	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Upper Arlington-006	PPE	1	0	1	1	1	1	0	0	1	1	0	1	1	0	9	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.36 VILLAGE OF URBANCREST

This section presents the jurisdictional annex for the Village of Urbancrest that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Urbancrest participated in the planning process, an assessment of the Village of Urbancrest's risk and vulnerability, the different capabilities used in the Village of Urbancrest, and an action plan that will be implemented to achieve a more resilient community.

9.36.1 Hazard Mitigation Planning Team

The Village of Urbancrest identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.36-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Elder Joseph Barnes, Sr. / Mayor	Name/Title:	Vera Ziglar-Zimmerman / Village Council
Address:	3492 First Avenue Urbancrest, OH 43123	Address:	3492 First Avenue Urbancrest, OH 43123
Phone Number:	(614) 875-1279	Phone Number:	(614) 875-1279
Email:	mayorjbarnes33ubc@sbcglobal.net	Email:	finance@villageofurbancrestoh.us
NFIP Floodplain Administrator			
Name/Title:	Matt Brown, Planning and Floodplain Administrator		
Address:	150 S. Front St., FSL, Suite 10, Columbus, OH 43215		
Phone Number:	(614) 525-5647		
Email:	mybrown@franklincountyohio.gov		
Additional Contributors			
Name/Title:	No additional contributors		
Method of Participation:			

9.36.2 Municipal Profile

The Village of Urbancrest is in the southwest corner of Franklin County and is surrounded by Columbus and Grove Cities with pieces of Franklin Township bordering some of the Village to the north. Marsh Run surrounds the Village flowing east to west.

According to the American Community Survey, the 2021 population for the Village of Urbancrest was 1,124, a 17.08 percent increase from the 2010 Census population of 960. Data from the 2021 American Community Survey indicates that 12.6 percent of the population is 5 years of age or younger and 8.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.36.3 Jurisdictional Capability Assessment and Integration

The Village of Urbancrest performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Urbancrest to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Urbancrest and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.36-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	2019 Residential Code of Ohio	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed.				
Zoning/Land Use Code	Yes	Franklin County Zoning Resolution – October 11, 2022	Franklin County	Zoning Officer
<i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building.				
Subdivision Ordinance	Yes	Franklin County Subdivision Regulations – March 27, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Franklin County Stormwater Drainage Manual – March 13, 2012	Franklin County	Franklin County Economic Development and Planning Department
<i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Franklin County's Flood Damage Reduction Regulation – September 19, 2007	Franklin County	Franklin County Floodplain Administrator
<i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding.				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Village of Urbancrest Community Plan, March 2022	Local	Franklin County Economic Development and Planning, Plan Working Committee
<i>How does this reduce risk?</i> This plan addresses land use, housing, transportation, economic development, and other planning issues facing the Village for the next 10-20 years.				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Franklin County Stormwater Management Plan – December 19, 2016	Franklin County	Stormwater Executive Committee
<i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Continuity of Operations Plan <i>How does this reduce risk?</i>	No	-	-	-
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	No	-	-	-
Post-Disaster Recovery Plan <i>How does this reduce risk?</i>	No	-	-	-
Public Health Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Urbancrest to oversee and track development.

Table 9.36-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	Residents are required to obtain a zoning compliance from the Village, but the Franklin County Building Department issues the building permit.
If you do not issue development permits, what is your process for tracking new development?	N/A	Coordinate with the Franklin County Building Department.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The Village of Urbancrest does not track permits; it coordinates with the Franklin County Building Department to maintain its list.
Do you have a buildable land inventory? • If yes, please describe	No	The Village does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage.
Describe the level of build-out in your jurisdiction.	N/A	The Village is primarily residential and industrial use with very little parks and recreations and institutional uses mixed in; there are also areas of commercial use. Above Route 270 is industrial and commercial use only. All residential, institutional, and parks and recreation uses are below Route 270; there is a small area of commercial use along Broadway/Harrisburg Pike.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Urbancrest and their current responsibilities that contribute to hazard mitigation.

Table 9.36-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Planning Commission meets on an as needed basis.
Zoning Board of Adjustment	Yes	<p>The Board of Zoning Appeals convenes on an as needed basis. The Board conducts public hearings and final determinations on approval, conditional approval, or denial of all applications for conditional uses, except for planned developments, variances, and appeals. The Board makes final determinations on approval or denial relating to properties with nonconformities as provided in the nonconformities section of the village ordinances. The Board determines the exact location of any zoning district boundary line should there be uncertainty as to the exact location involved. The Board must file an Annual Report with the Village Council and Village Mayor setting forth its transactions and recommendations.</p> <p>The Board of Zoning Appeals will adopt bylaws and other procedural rules consistent with Village ordinances and state statutes; recommend to the Village Council the employment of such professional zoning, legal, engineering of administrative staff or consulting assistance as is necessary to fulfill its</p>

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		responsibilities; and carry out any other functions that may be conferred upon it by any other Village ordinance or state statute and discharge any other duties referred or assigned to it by Village Council.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Street Commission
Construction/Building/Code Enforcement Department	Yes	The purpose of code enforcement within the Village of Urbancrest is to respond to concerns from citizens that affect the quality of life within the Village of Urbancrest. Such as zoning, overgrown lots or yards, inoperative or unlicensed vehicles, maintenance of structures, illegal signs, and public nuisances. Systematic inspections are also performed to ensure properties are compliant with the village zoning code.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual		Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	Yes	The Village of Urbancrest Board of Public Affairs is charged with the responsibility of maintaining the Village's Sanitary and Storm Sewer services provided to the residents of the Village of Urbancrest. The board may make laws and rules relative to the safe, efficient, and economical management and protection of the village's utilities.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Village of Urbancrest.

Table 9.36-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas, or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Urbancrest.

Table 9.36-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Contracted to Robert J. Mitchell
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Urbancrest.

Table 9.36-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.36-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.36.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP).

The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Urbancrest.

Table 9.36-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Urbancrest (V)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Urbancrest.

Table 9.36-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction?	Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigated properties, how were the projects funded?	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County Economic Development & Planning Department (EDP)
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Unsure
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Franklin County EDP will evaluate cost of improvements and current value of structure

NFIP Topic	Comments
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2017
What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended?	Special Resolution National Flood Insurance Program Regulation
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	2007
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, freeboard requirement
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.36.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.36-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.36-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.36.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Urbancrest's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Urbancrest has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.36-1. Village of Urbancrest Hazard Area Extent and Location Map – Flood

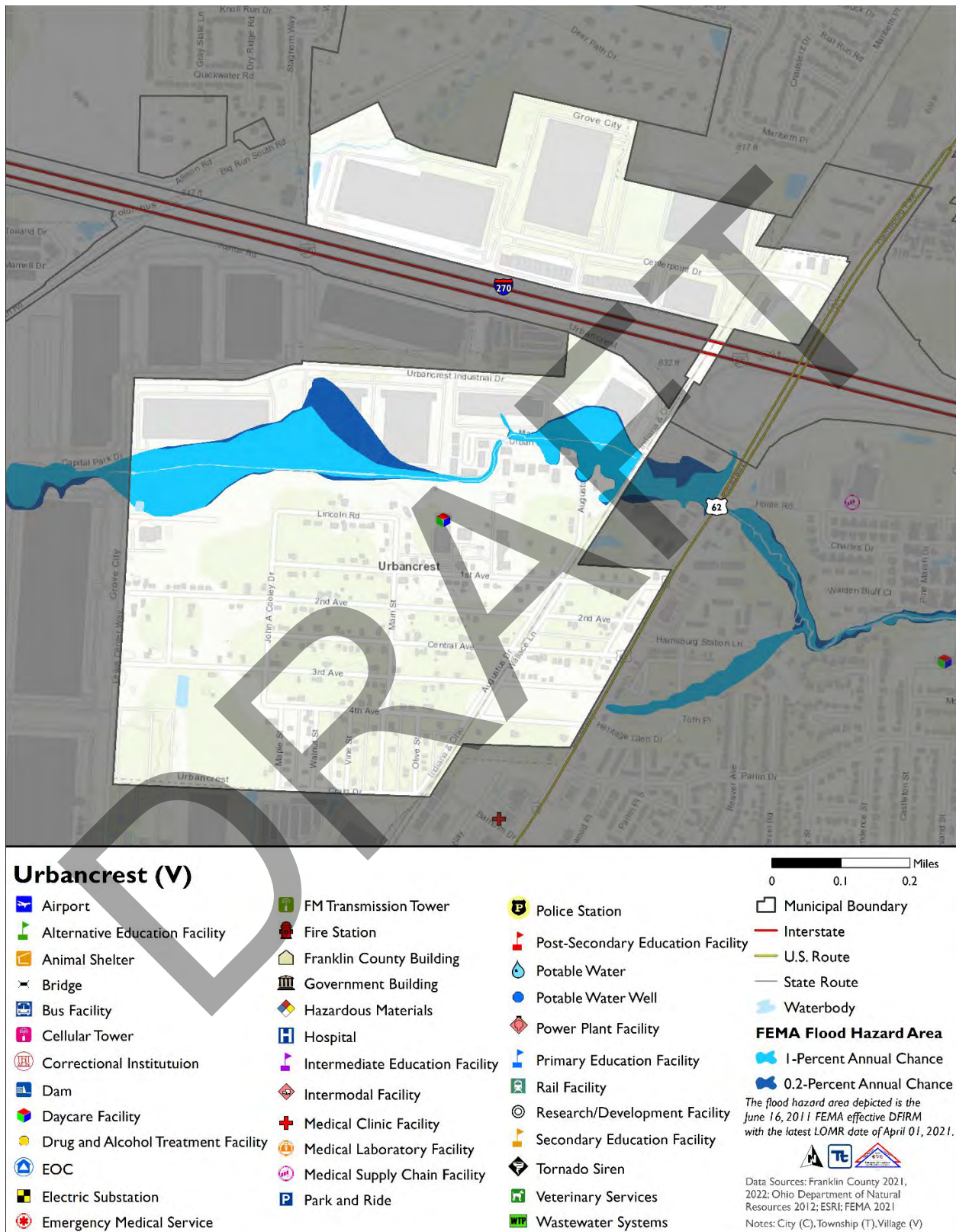


Figure 9.36-2. Village of Urbancrest Hazard Area Extent and Location Map – Land Subsidence

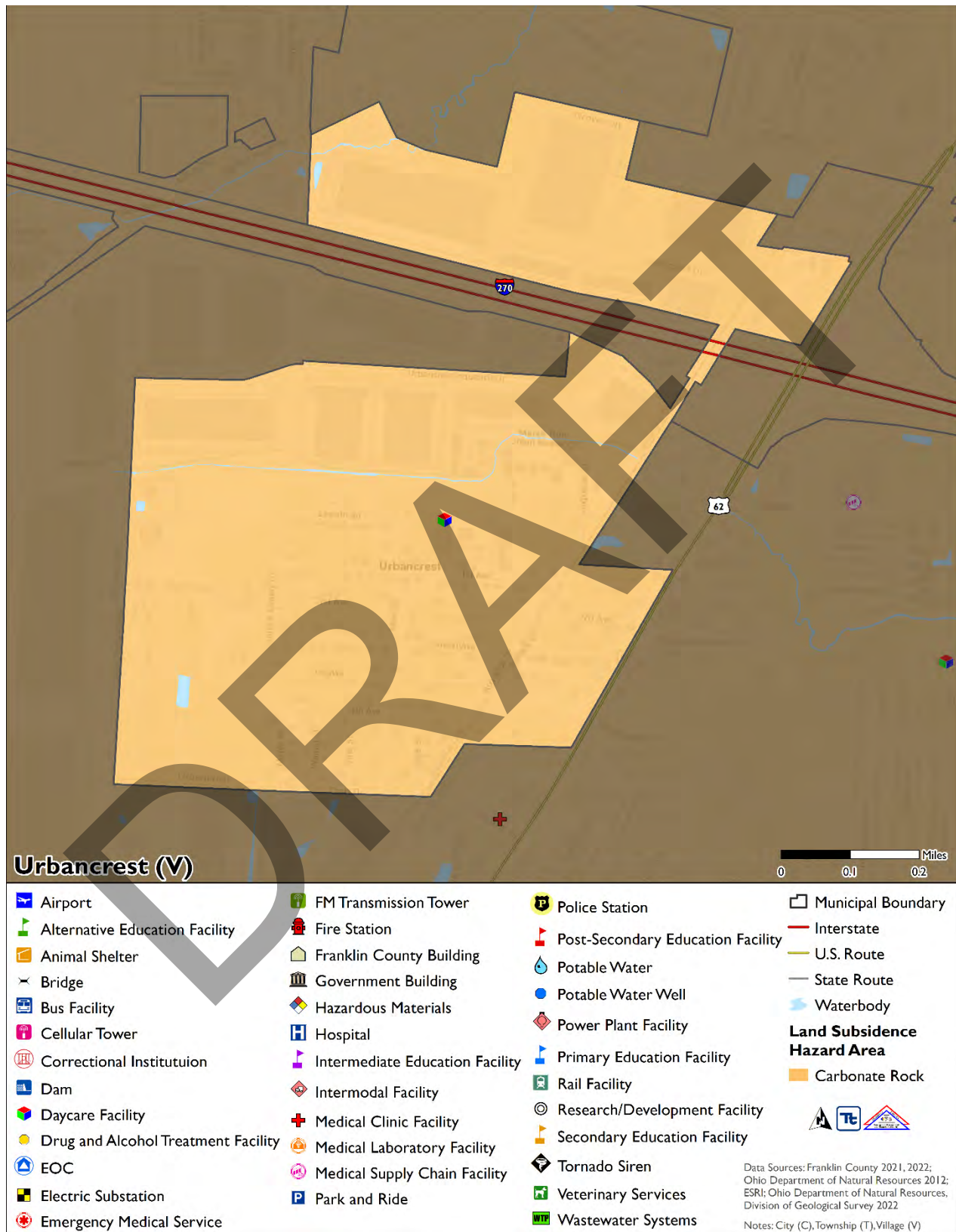
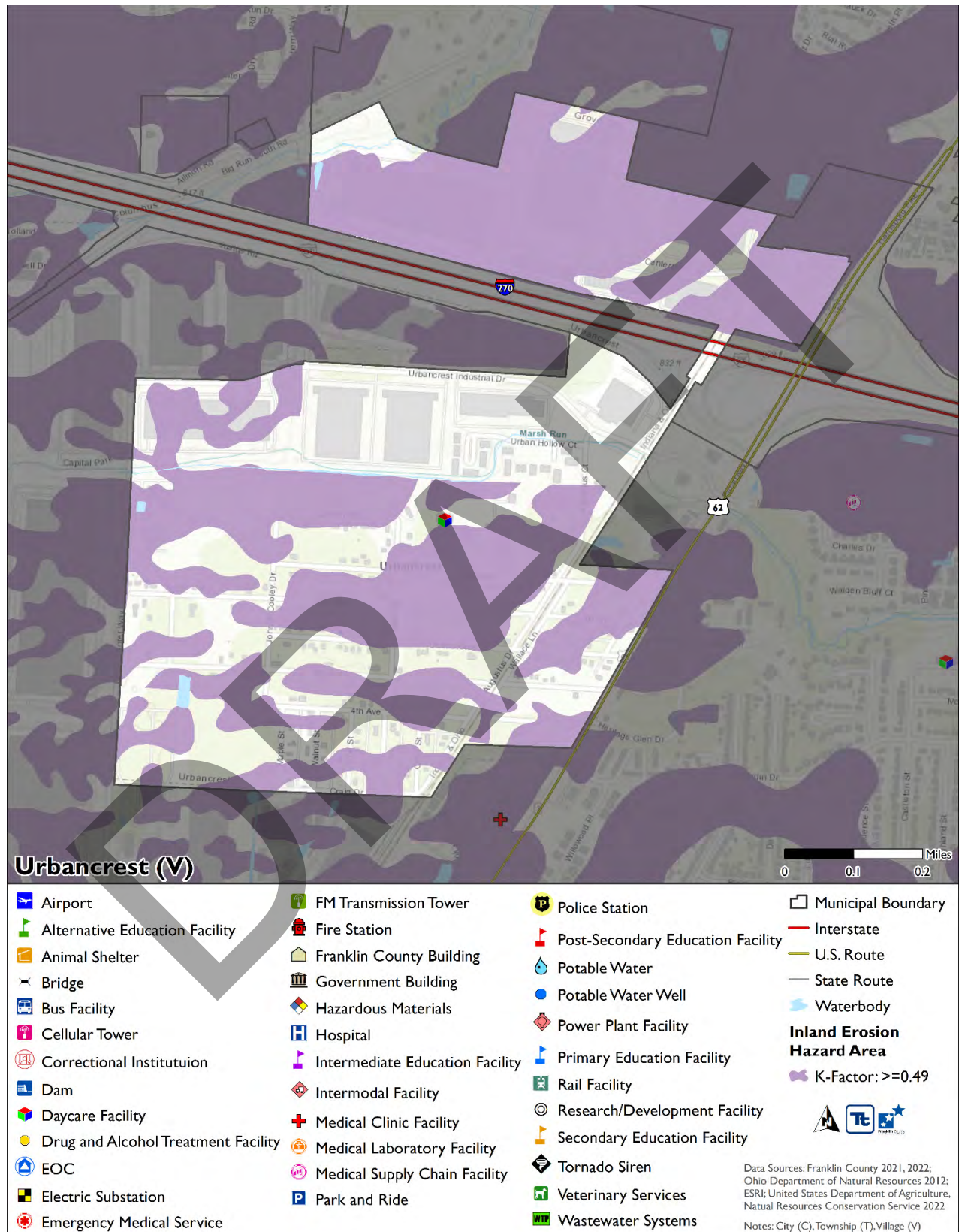


Figure 9.36-3. Village of Urbancrest Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Urbancrest history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Urbancrest experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.36-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Village of Urbancrest experienced no damages or losses from this event.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Village of Urbancrest experienced no damages or losses from this event.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village of Urbancrest experienced no damages or losses from this event.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of

Urbancrest. The Village of Urbancrest reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.36-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Low
Disease Outbreak	Medium
Drought	Medium
Earthquake	Low
Extreme Temperatures	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.36-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Urbancrest

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Village of Urbancrest identified the following vulnerabilities within its community:

- The Village does not have an emergency shelter for residents in need during an event.
- Village residents may not be aware of impacts hazards have on themselves and their property.
- There is no back-up power at any Village critical facilities.

9.36.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.



Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

DRAFT

Table 9.36-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Purchase and construct a "SAFE HOUSE" for residents to go to in case of severe weather. (300,000 / 9 months)	Village Administration and Mayor's office	-	-	-	-
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2,000 / 4 months)	Village Administration and Mayor's office	-	-	-	-
Purchase Tornado Sirens through Franklin County Emergency Management & homeland Security additional Tornado Sirens around our community. (40,000 / 4 months)	Village Administration and Mayor's office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Urbancrest identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Village of Urbancrest has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Urbancrest participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.36-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	X	X	-	X	-	X	X	-	-	X
Disease Outbreak	X	-	-	X	-	-	X	-	-	X
Drought	X	X	-	X	-	X	X	-	-	X
Earthquake	X	X	-	X	-	X	X	-	-	X
Extreme Temperatures	X	X	-	X	-	X	X	-	-	X
Flood	X	X	-	X	-	X	X	-	-	X
Geologic	X	X	-	X	-	X	X	-	-	X
Invasive Species	-	X	-	X	-	X	X	-	-	X
Severe Summer Weather	X	X	-	X	-	X	X	-	-	X
Severe Winter Weather	X	X	-	X	-	X	X	-	-	X
Tornadoes	X	X	-	X	-	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.38-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village or Urbancrest will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.36-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Urbancrest-001	Emergency Shelter Identification	<p>Problem: The Village of Urbancrest currently does not have a specified location for a shelter in case of emergency.</p> <p>Solution: Identify a location for an emergency shelter which residents can go to in case of an emergency.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes	1, 4	2 years	Village Council	Local Funds	Medium	Low	High	LPR	ES
2023-Urbancrest-002	Critical facility Back-Up Generator	<p>Problem: Although currently undefined, an emergency shelter would need to provide basic needs for residents, including heating and air conditioning. No critical facilities in the Village of Urbancrest currently have back-up power.</p> <p>Solution: Install a back-up/emergency generator and transfer switch to the identified building or</p>	Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	6	3 years	Village Council	BRIC, HMGP	Medium	Medium	Medium	SIP	PP, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		facility which will be used as an emergency shelter/contact center.										
2023-Urbancrest-003	All-Hazards Education Campaign	<p>Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Village.</p> <p>Solution: Work with Franklin County EM&HS to provide residents with the necessary information to understand the threats of all hazards and protect themselves and their property.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	2, 4, 5	2 years	Franklin County EM&HS and Village Council	HMGP, Local Funds	High	Low	High	EAP	PI

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.36-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Urbancrest-001	Emergency Shelter Identification	1	0	1	1	1	1	1	0	1	1	1	1	0	0	10	High
2023-Urbancrest-002	Critical facility Back-Up Generator	1	1	1	1	1	1	0	-1	0	1	1	1	0	0	8	Medium
2023-Urbancrest-003	All-Hazards Education Campaign	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.37 VILLAGE OF VALLEYVIEW

This section presents the jurisdictional annex for the Village of Valleyview that provides resources and information to assist public and private sectors to in reducing from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Valleyview participated in the planning process, an assessment of the Village of Valleyview's risk and vulnerability, the different capabilities used in the Village of Valleyview, and an action plan that will be implemented to achieve a more resilient community.

9.37.1 Hazard Mitigation Planning Team

The Village of Valleyview identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village of Valleyview departments. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.37-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Marzia Helton/Mayor	Name/Title:	-
Address:	432 N Richardson Ave Valleyview, OH 43204	Address:	-
Phone Number:	614-279-5630	Phone Number:	-
Email:	fiscal@valleyviewohio.org	Email:	-
NFIP Floodplain Administrator			
Name/Title:	Marzia Helton, Mayor		
Address:	436 North Richardson Street, Valleyview OH, 43204		
Phone Number:	614-279-5630		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.37.2 Municipal Profile

The Village of Valleyview is located in northeastern Franklin County and is located within the outskirts of Columbus and is considered to be an enclave to the City. The Village is located in the Franklin Township part of the city. Dry Run creek flows throughout the Village.

According to the American Community Survey, the 2021 population for the Village of Valleyview was 722, a 16.45 percent increase from the 2010 Census population of 620. Data from the 2021 American Community Survey indicates that 5.8 percent of the population is 5 years of age or younger and 14.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.37.3 Jurisdictional Capability Assessment and Integration

The Village of Valleyview performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Valleyview to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Valleyview and provides information as to how the capability integrates hazard mitigation and risk reduction.



Table 9.37-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Chapter 1420	Local	Building Department
<i>How does this reduce risk?</i> Within the scope of the Building Code its purpose shall be to provide minimum standards to safeguard life and limb, health, property and the public welfare.				
Zoning/Land Use Code	Yes	Title 4	Local	Planning Commission
<i>How does this reduce risk?</i> Council finds that the Planning Commission has certified to Council a plan for dividing the Village into districts, including limitations and regulations of the height, bulk and location (including percentage of lot occupancy, setback building lines and areas of yards, courts and other open spaces) and uses of buildings, other structures and premises in such districts.				
Subdivision Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i> Helps to alleviate flooding and focuses on managing storm water storage.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 1228	Local	Village Council
<i>How does this reduce risk?</i> The Village has special flood hazard areas that are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. In order to minimize the threat of such damages and to achieve the purposes hereinafter set forth, these regulations are adopted.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Other	Yes	Historic Preservation Ordinance	Local	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Other	-	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Valleyview to oversee and track development.

Table 9.37-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	This is performed by Franklin County
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? • If yes, please describe	N/A	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Valleyview and their current responsibilities that contribute to hazard mitigation.

Table 9.37-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Members: <ul style="list-style-type: none"> • Jerry Piasecki • Jeff Wyatt • Mike Bertovich • Joe White • Marty Johnston
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Effective January 1, 1996, a Recreation Board is hereby authorized and established, vested with authority to supervise and maintain playgrounds, playfields, gymnasiums, public baths, swimming pools and indoor recreation centers, and possessed of all the powers and subject to all the responsibilities imposed upon it by law, the Village ordinances and the directions of Council.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Among the specific powers and duties of the Economic Development Commission shall be the planning of the economic development of the Village, the progressive pursuit of establishing new business in the Village with the intent of creating jobs and employment opportunities and the recommendation of appropriate development incentives to insure projects that come to the Village are economically viable.
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		

Fiscal Capability

The table below summarizes financial resources available to the Village of Valleyview.

Table 9.37-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Valleyview.

Table 9.37-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	-	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	-	-
Social media for hazard mitigation education and outreach	-	-
Citizen boards or commissions that address issues related to hazard mitigation	-	-
Warning systems for hazard events	-	-
Natural disaster/safety programs in place for schools	-	-

Outreach Resources	Available? (Yes/No)	Comment:
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	-	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Valleyview.

Table 9.37-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other			

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.37-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.37.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Valleyview.

Table 9.37-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Valleyview (V)	3	4	\$8,719.88	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Valleyview.

Table 9.37-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	-
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	-
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	-
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered

NFIP Topic	Comments
	when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	-
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	-
NFIP Compliance	
What local department is responsible for floodplain management?	-
Are any certified floodplain managers on staff in your jurisdiction?	-
Do you have access to resources to determine possible future flooding conditions from climate change?	-
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	-
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	-
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	-
What are the barriers to running an effective NFIP program in the community, if any?	-
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	-
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	-
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	-
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	-
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	-
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	-

9.37.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.37-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.37-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.37.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Valleyview's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Valleyview has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.37-1. Village of Valleyview Hazard Area Extent and Location Map-Flood

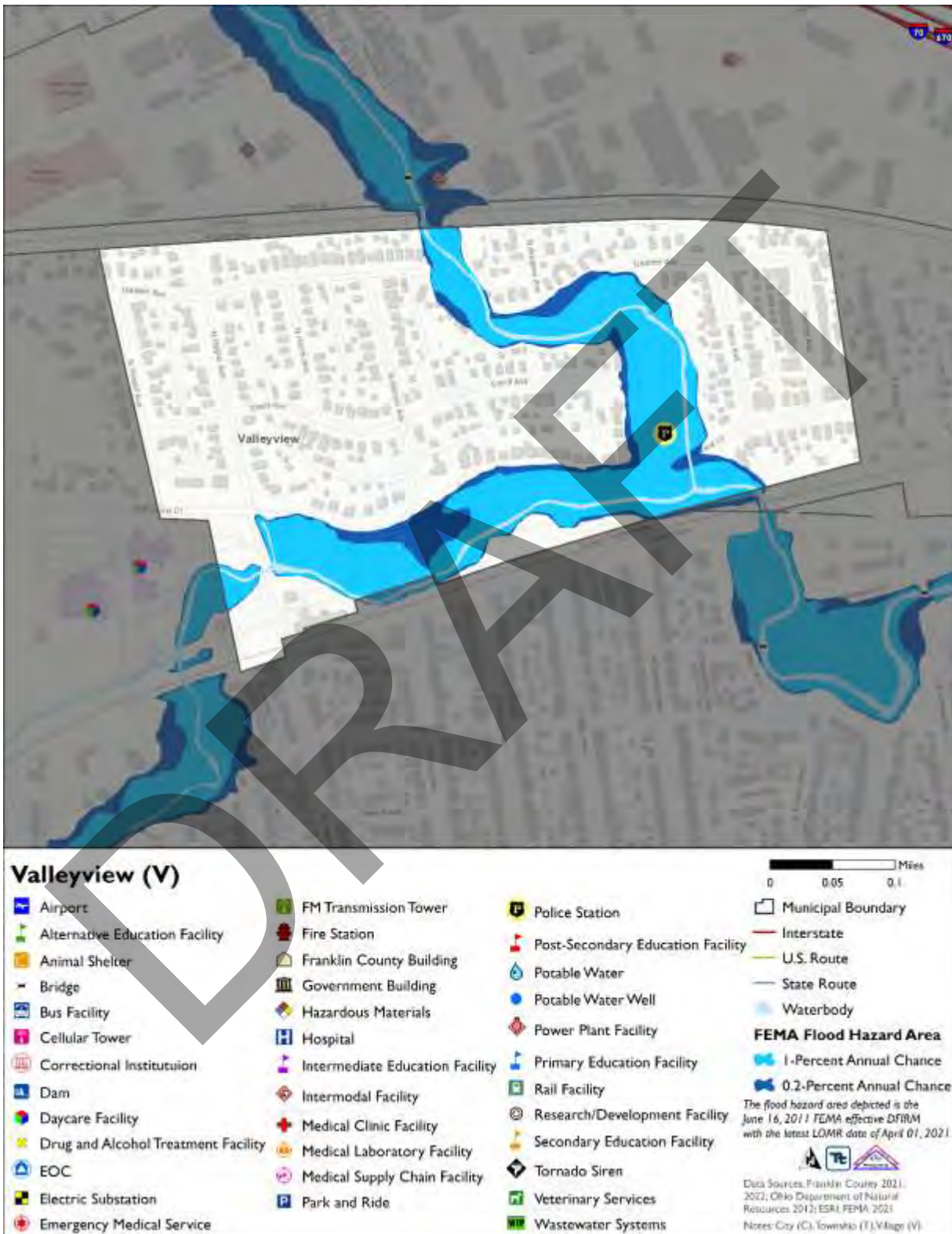


Figure 9.37-2. Village of Valleyview Hazard Area Extent and Location Map-Inland Erosion

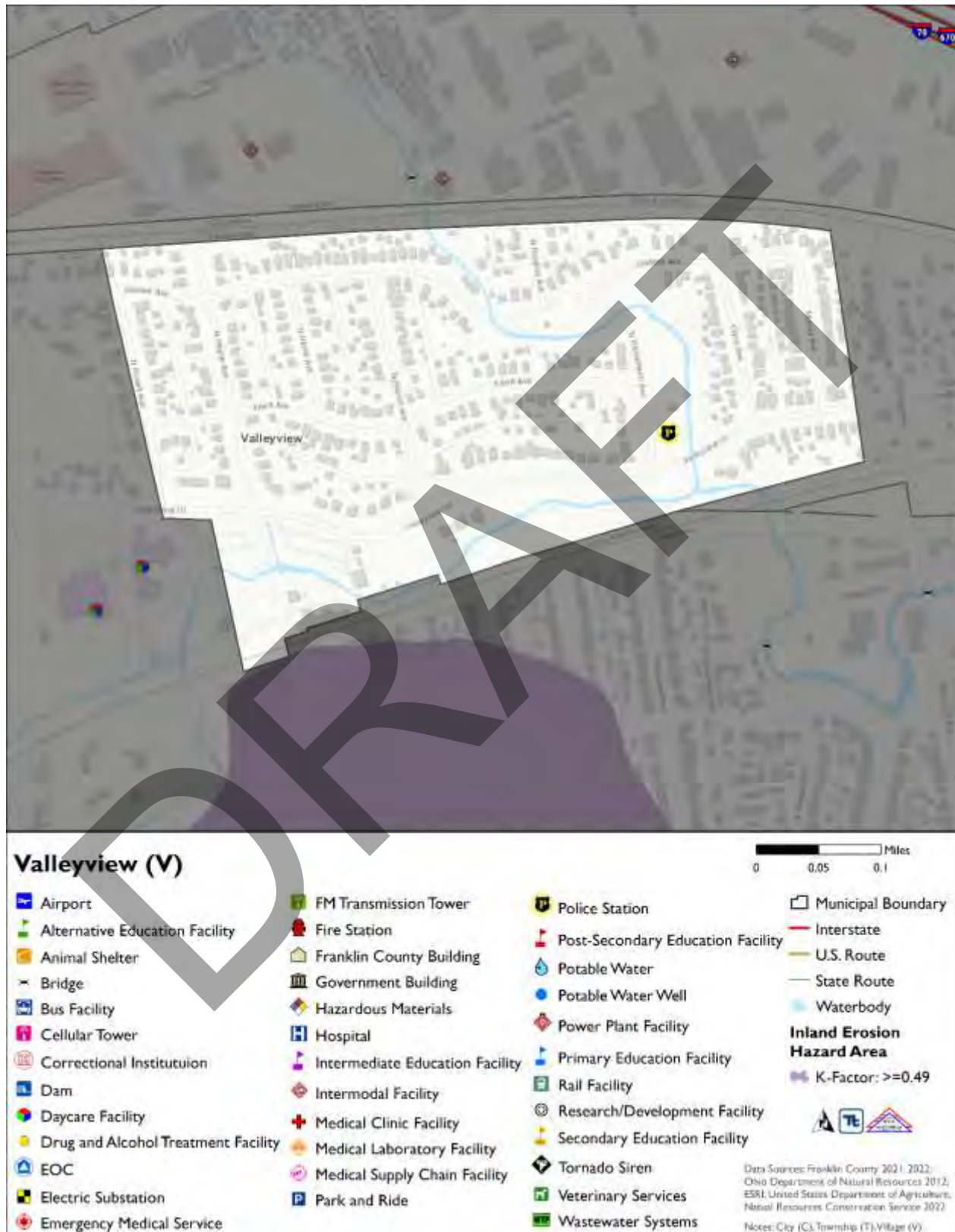
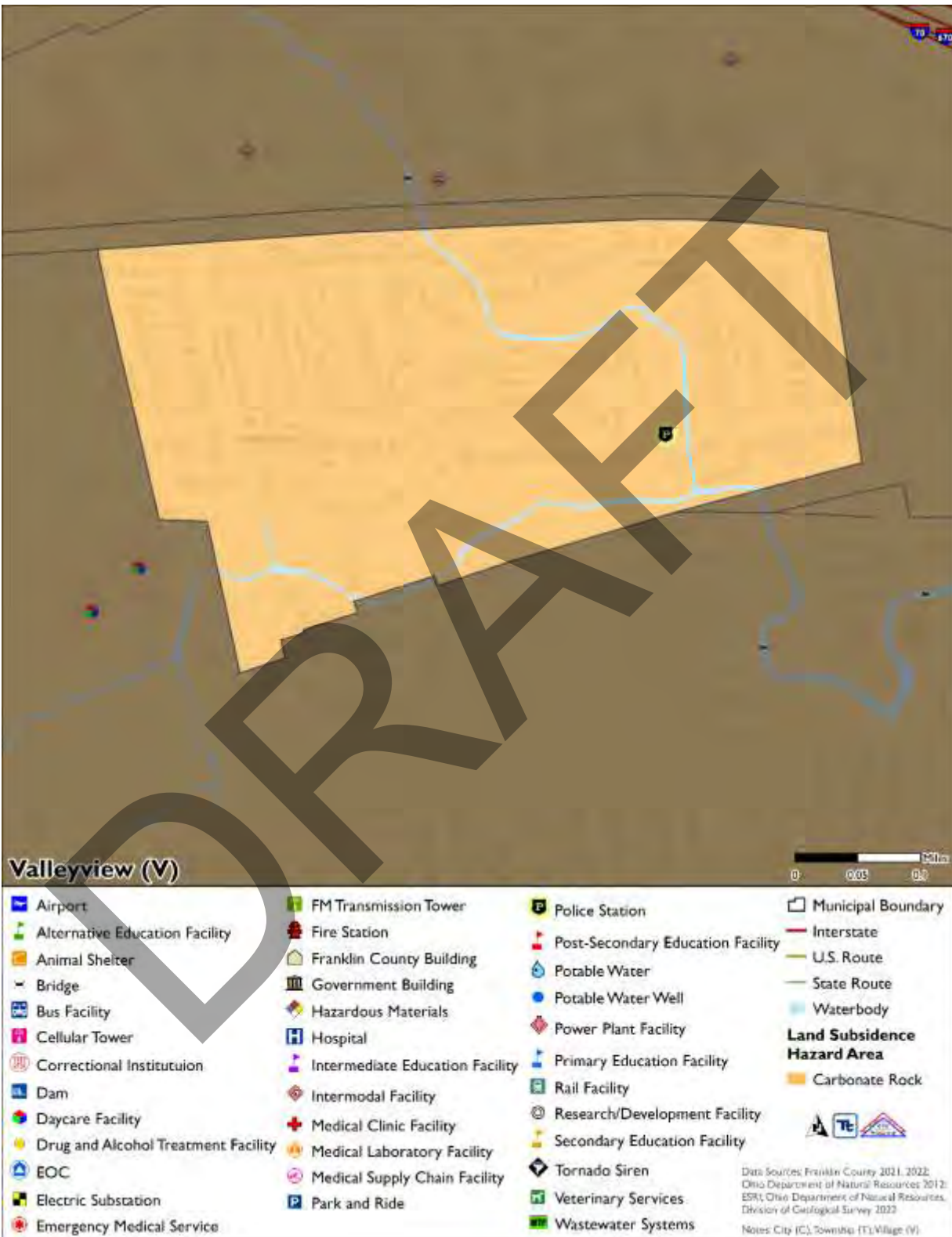


Figure 9.37-3. Village of Valleyview Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The Village of Valleyview's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Valleyview experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.37-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The Village did not experience any notable damages or losses.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Village did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Village did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Village did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each

municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Valleyview. The Village of Valleyview reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.37-14. Hazard Ranking Input

Hazard	Rankings
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.37-15. Number of Critical Facilities and Community Lifelines in Hazard Areas

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	1
0.2-Percent Annual Chance Flood Event Hazard Area	-	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	1	1
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Village of Valleyview identified the following vulnerabilities within its community:

- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Valleyview Police Department
- The Village residents are not aware of the impacts that the hazards of concern may and will have on them and their property.

9.37.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.37-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Achieve acquisition of the Village Hall. This is a Village owned facility and is subject to repeat flooding as it is not only located in the Floodway, but it is subjected to runoff from homes located at a higher elevation.	Mayor's office	-	-	-	-
Assess and mitigate the impacts of the Hague Avenue bridge reconstruction project (City of Columbus capital improvement project) on the Dry Run Creek.	Mayor's office	-	-	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Valleyview identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Village of Valleyview has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.37-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	-	-	X	-	-	X	-	-	X
Disease Outbreak	-	-	-	X	-	-	X	-	-	X
Drought	-	-	-	X	-	-	X	-	-	X
Earthquake	-	-	-	X	-	-	X	-	-	X
Extreme Temp	-	-	-	X	-	-	X	-	-	X
Flood	-	X	-	X	-	-	X	-	X	X
Geologic	-	-	-	X	-	-	X	-	-	X
Invasive Species	-	-	-	X	-	-	X	-	-	X
Severe Summer Weather	-	-	-	X	-	-	X	-	-	X
Severe Winter Weather	-	-	-	X	-	-	X	-	-	X
Tornado	-	-	-	X	-	-	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.37-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Valleyview will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.37-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Village of Valleyview-001	Flood Vulnerability Evaluation	<p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Valleyview Police Department <p>Solution: The Village will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the Village will carry out the option.</p>	Flood	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	Critical facilities will be able to continue to operate and will not flood as often.	TBD after feasibility assessment	High	SIP	SP
2023-Village of	Hazard Education and Notification	<p>Problem: The Village residents are not aware of the impacts that the hazards</p>	Dam/Levee. Disease Outbreak.	1, 6	1 Year	Village Administration	Village Budget	Residents will be more knowledgeable	Staff Time	High	EAP	PI, ES



Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
Valleyview-002		of concern may and will have on them and their property. Solution: The Village will promote hazard education on their website and will ensure that all residents are signed up for the County wide notification system.	Drought. Earthquake. Extreme Temp. Flood. Geologic. Invasive Species. Severe Summer Weather. Severe Winter Weather. Tornado					about the hazards of concern.				

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.37-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Village of Valleyview-001	Flood Vulnerability Evaluation	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2023-Village of Valleyview-002	Hazard Education and Notification	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.38 WASHINGTON TOWNSHIP

This section presents the jurisdictional annex for Washington Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Washington Township participated in the planning process, an assessment of Washington Township's risk and vulnerability, the different capabilities used in Washington Township, and an action plan that will be implemented to achieve a more resilient community.

9.38.1 Hazard Mitigation Planning Team

Washington Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Washington Township departments, including Township Administrator. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.38-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Eric Richter - Administrator	Name/Title:	Alec O’Connell – Fire Chief
Address:	6200 Eiterman Road, Dublin, OH 43016	Address:	6200 Eiterman Road, Dublin, OH 43016
Phone Number:	614-652-3920	Phone Number:	614-652-3920
Email:	erichter@wtwp.com	Email:	aoconnell@wtwp.com
NFIP Floodplain Administrator			
Name/Title:	-		
Address:	-		
Phone Number:	-		
Email:	-		
Additional Contributors:			
Name/Title:	No additional contributors		
Method of Participation:			

9.38.2 Municipal Profile

Washington Township contains 27.5 square miles in northwest Franklin County, southwestern Delaware County and eastern Union County. The entire City of Dublin is located within the Township. The Township is part of the greater Columbus metropolitan area. Washington Township is governed by an elected board of trustees and an elected fiscal officer. The Township has several large businesses including Cardinal Health, Ashland Chemical, OCLC, and Wendy's International (Washington Township 2022).

The Township was the first to successfully establish township zoning in Franklin County in the early 1950s and a Zoning Board of Appeals was established in 1954. Today the Township provides fire and EMS services to the entire City of Dublin, and other unincorporated areas of Franklin County including the Town of Amlin, and parcels along Cosgray, Hayden Run and Dublin roads (Washington Township 2022).

According to the American Community Survey, the 2021 population for Washington Township was 42,997, a 1.4 percent decrease from the 2010 Census. Data from the 2021 American Community Survey indicates that 5.8 percent of the population is 5 years of age or younger and 12.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.38.3 Jurisdictional Capability Assessment and Integration

Washington Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Washington Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Washington Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.38-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Residential Code of Ohio	County, State	Franklin County Economic Development and Planning
<i>How does this reduce risk?</i> Washington Township adopted the Franklin County 2019 Residential Code of Ohio which regulates 1, 2, and 3 family dwellings and residential homes.				
Zoning/Land Use Code	Yes	Washington Township Zoning Resolution	Local	Township Zoning Department
<i>How does this reduce risk?</i> Washington Township Zoning Resolution is designed to promote and encourage the appropriate use of land through stabilizing and preserving the value of property, preventing congestion in the roadways and streets, to secure the safety from fire, flood, water contamination, air pollution and other dangers that impact infrastructure and public health, while providing adequate light, air and open space. The Zoning Resolution prevents overcrowding of land and avoids undue concentrations of population throughout the township.				
Subdivision Ordinance	Yes	500 – Development Standards	Washington Twp.	Fiscal Officer
<i>How does this reduce risk?</i> The City of Dublin maintains the subdivision ordinance for Washington Township.				
Site Plan Ordinance	Yes	500 – Development Standards	Washington Twp.	Joyce Robinson
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	500 – Development Standards	Washington Twp.	Joyce Robinson
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Emergency Management Ordinance	Yes	ORC 505.82	Trustees	Administrator
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	Yes	Washington Township Comprehensive Plan	Local	Washington Township Board of Trustees
<i>How does this reduce risk?</i> The Washington Township Comprehensive Plan focuses on maintaining the rural community character, environmentally sensitive development that will protect the townships cultural features and increasing public facilities strategies for unincorporated areas of the Township.				
Capital Improvement Plan	Yes	Washington Twp (Internal)	Local	Administrator
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	Yes	County EOP, Township EOP and City of Dublin EOP	Local, County	Administrator
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	500 – Development Standards	Washington Twp.	Joyce Robinson
<i>How does this reduce risk?</i>				
Open Space Plan	Yes	500 – Development Standards	Washington Twp.	Joyce Robinson
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-
Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i>	No	-	-	-
Tourism Plan <i>How does this reduce risk?</i>	No	-	-	-
Business/ Downtown Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Other <i>How does this reduce risk?</i>	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> The Township of Washington utilizes the Franklin County Emergency Operations Plan in conjunction with the Town and City of Dublin.	Yes	County EOP, Township EOP and City of Dublin EOP	Multiple	Administrator
Continuity of Operations Plan <i>How does this reduce risk?</i>	Yes	Washington Twp. COOP Plan	Trustees	Battalion Chief
Strategic Recovery Planning Report <i>How does this reduce risk?</i>	No	-	-	-
Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i>	Yes	Franklin County EOP	County	FCEMA
Post-Disaster Recovery Plan <i>How does this reduce risk?</i> The Township of Washington utilizes the Franklin County Emergency Operations Plan in conjunction with the Town and City of Dublin.	Yes	County EOP, Township EOP and City of Dublin EOP	Multiple	Administrator
Public Health Plan <i>How does this reduce risk?</i>	Yes	County Board of Health	Board of Health	Board of Health
Other <i>How does this reduce risk?</i>	No	-	-	-

Development and Permitting Capability

The table below summarizes the capabilities of Washington Township to oversee and track development.

Table 9.38-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits?	No	-

Indicate if your jurisdiction implements the following	Yes/No	Comment:
<ul style="list-style-type: none"> If yes, what department is responsible? 		
If you do not issue development permits, what is your process for tracking new development?	N/A	The Township maintains the zoning authority for the unincorporated Washington Township.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	Franklin County issues building permits for Washington Township
Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe 	N/A	
Describe the level of build-out in your jurisdiction.	N/A	There is minimal build-out in the Township due to the lack of public water and sewer utilities. To obtain such utilities, the township land has to be annexed to a municipality.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Washington Township and their current responsibilities that contribute to hazard mitigation.

Table 9.38-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	Yes	Zoning Commission – Board of Zoning Appeals -
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	Yes	Via Franklin County Building Department
Emergency Management/Public Safety Department	Yes	Via Franklin County EMA and City of Dublin Emergency Management Coordinator
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Via Franklin County EMA and City of Dublin
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Washington Township provides snow removal, ditch maintenance, street sign maintenance and pavement maintenance for Township roads. Township roads include Baldwin Road, Fulk Road, Holiday Lane, Shier Lane, Fishel Drive and the alleys in the unincorporated town of Amlin. Washington Township has contracted with The City of Dublin and Franklin County Engineer to plow snow and spread salt as needed. The City of Dublin will be covering the Amlin area (including alleys). Franklin County Engineer will be covering Shier Lane, Holiday Lane, Baldwin Road, and Fishel Drive. Plowing and ice control in these areas will take place after primary roads have been cleared.
Mutual aid agreements	Yes	<ul style="list-style-type: none"> City of Dublin Emergency Operations Plan Washington Township works closely with the Franklin County engineer to tour and inspect roads and to identify and fulfill maintenance needs. By law, the county engineer serves as engineer for the townships. The county engineer bids for maintenance services, in line

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		with county and other township projects under way in the county. Funds are provided through gasoline taxes and motor vehicle license fees to pay for the maintenance work and road signage. <ul style="list-style-type: none"> Washington Township partners with other Townships, Franklin County and the Franklin Soil and Water Conservation District to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Program.
Human Resources Manual	Yes	
Other	Yes	Zoning Department - The Zoning Department is responsible for enforcement of the Zoning Resolution within the unincorporated area of the township, including issuing permits; assisting residents and property owners with zoning and land-use questions; and providing informational assistance to the Zoning Commission and Board of Zoning Appeals.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering firm is contracted through the Township to design and build stormwater drainage improvements
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Franklin County EMA
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	City of Dublin GIS Department
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	Franklin County EMA or City of Dublin Emergency Management Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to Washington Township.

Table 9.38-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other federal or state Funding Programs	Ohio Public Works Commission Grant and Loan
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Washington Township.

Table 9.38-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	The Township maintains Facebook and Twitter social media pages and uses those pages to relay information regarding general news and information regarding hazards.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Franklin County EMA and City of Dublin (sirens)
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Website, social media and printed newsletters

Community Classifications

The table below summarizes classifications for community programs available to Washington Township.

Table 9.38-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	ISO - Class 1	2017
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future

hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.38-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic (Erosion)	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Strong
Tornado	Moderate

9.38.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Washington Township.

Table 9.38-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Washington (Twp)	NR	NR	NR	NR	NR

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Washington Township.

Table 9.38-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	The unincorporated Washington Township has a number of agricultural fields that capture minor ponding during heavy rains. The Township does not have a record of agricultural losses.
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	The unincorporated Washington Township has no residents who have inquired about flood mitigation.
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	N/A
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	None in Washington Township.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Franklin County EMA and Building Department
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	The Township utilizes FEMA documentation for climate change related conditions.
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	N/A
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	N/A
What are the barriers to running an effective NFIP program in the community, if any?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
<ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? 	N/A
Does your floodplain management program meet or exceed minimum requirements?	N/A

NFIP Topic	Comments
<ul style="list-style-type: none"> If exceeds, in what ways? 	
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	The Township zoning resolution from September 12 th , 2012
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	N/A

9.38.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.38-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.38-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.38.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Washington Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which Washington Township has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.38-1. Washington Township Hazard Area Extent and Location Map – Flood

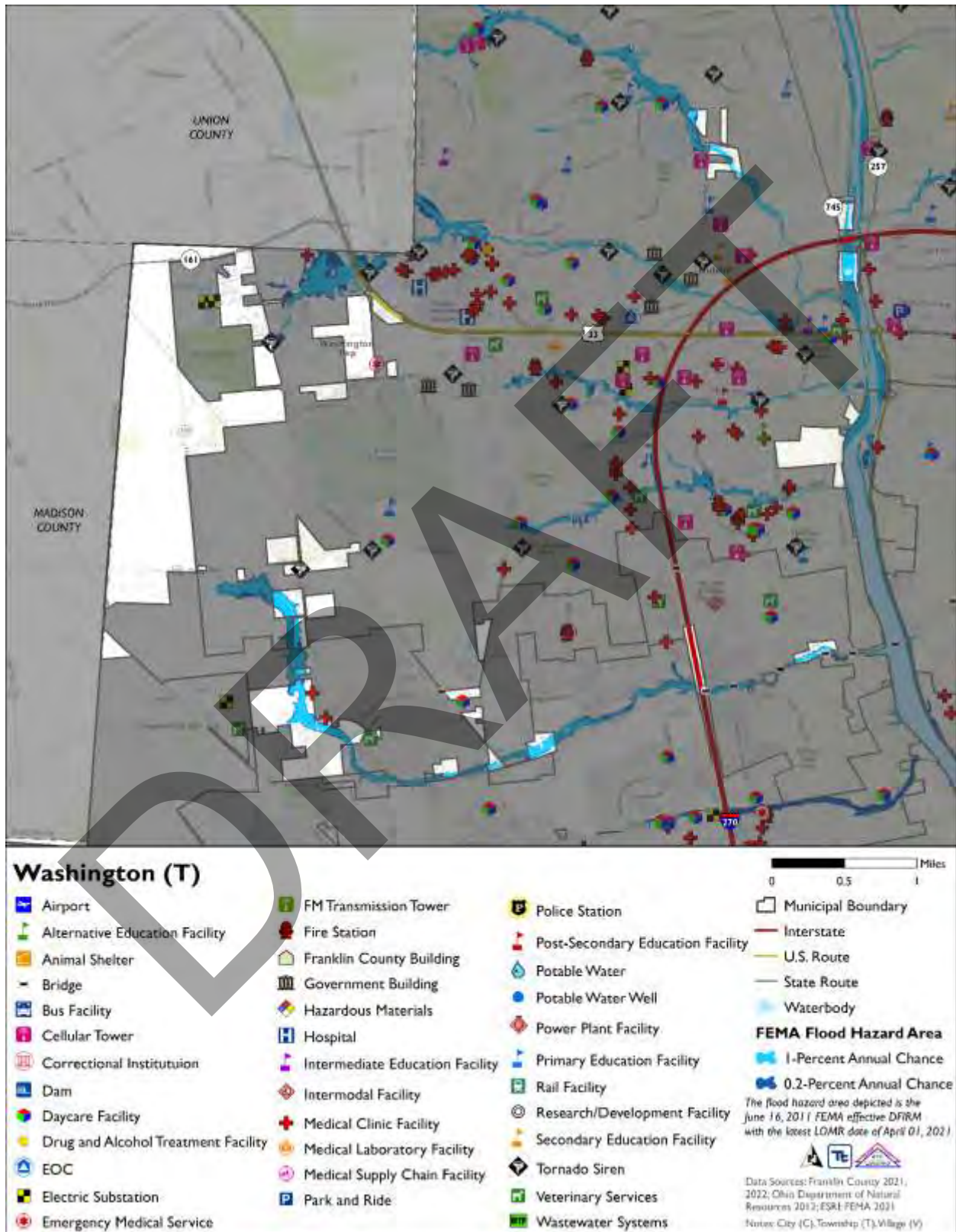


Figure 9.38-2. Washington Township Hazard Area Extent and Location Map – Inland Erosion

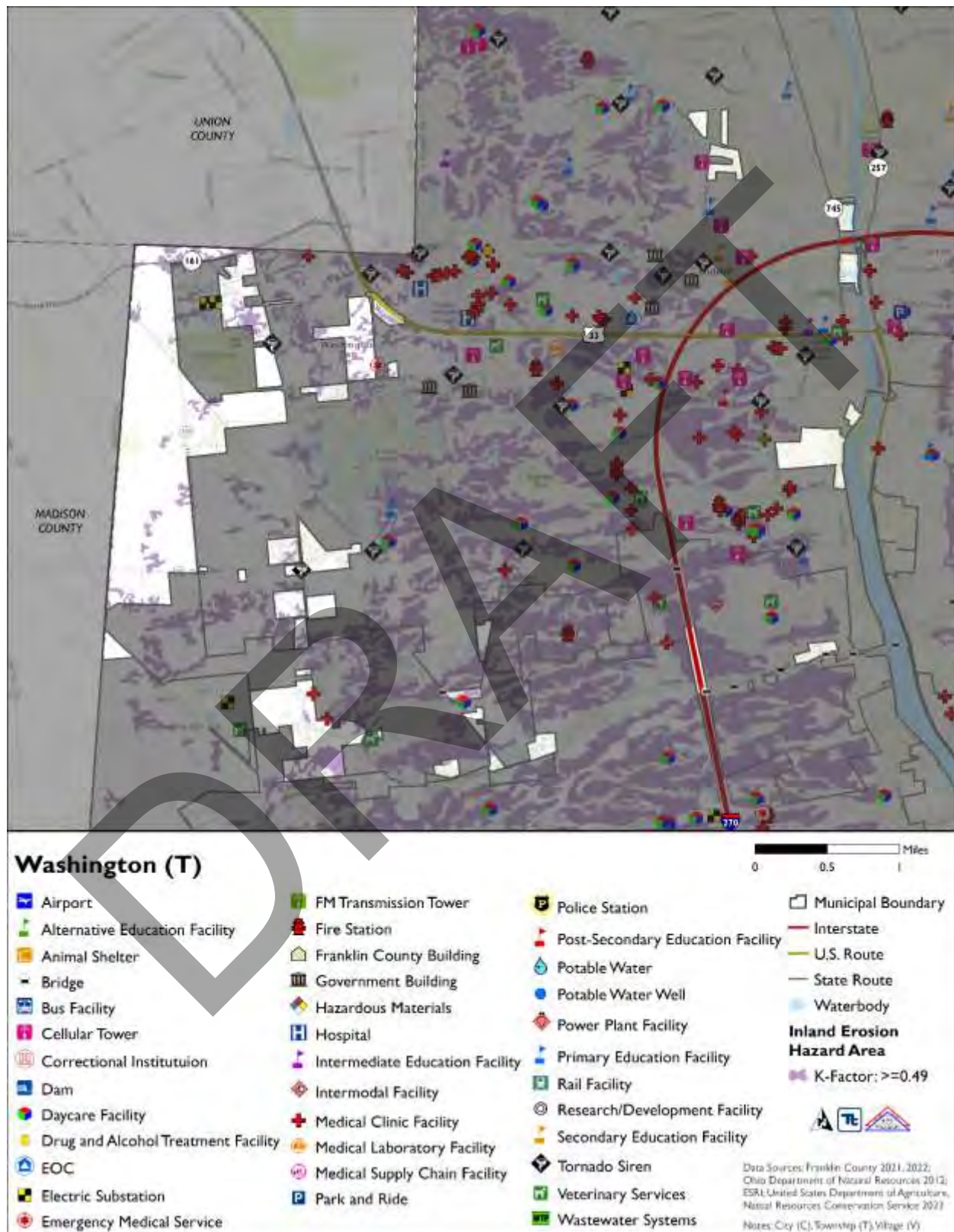
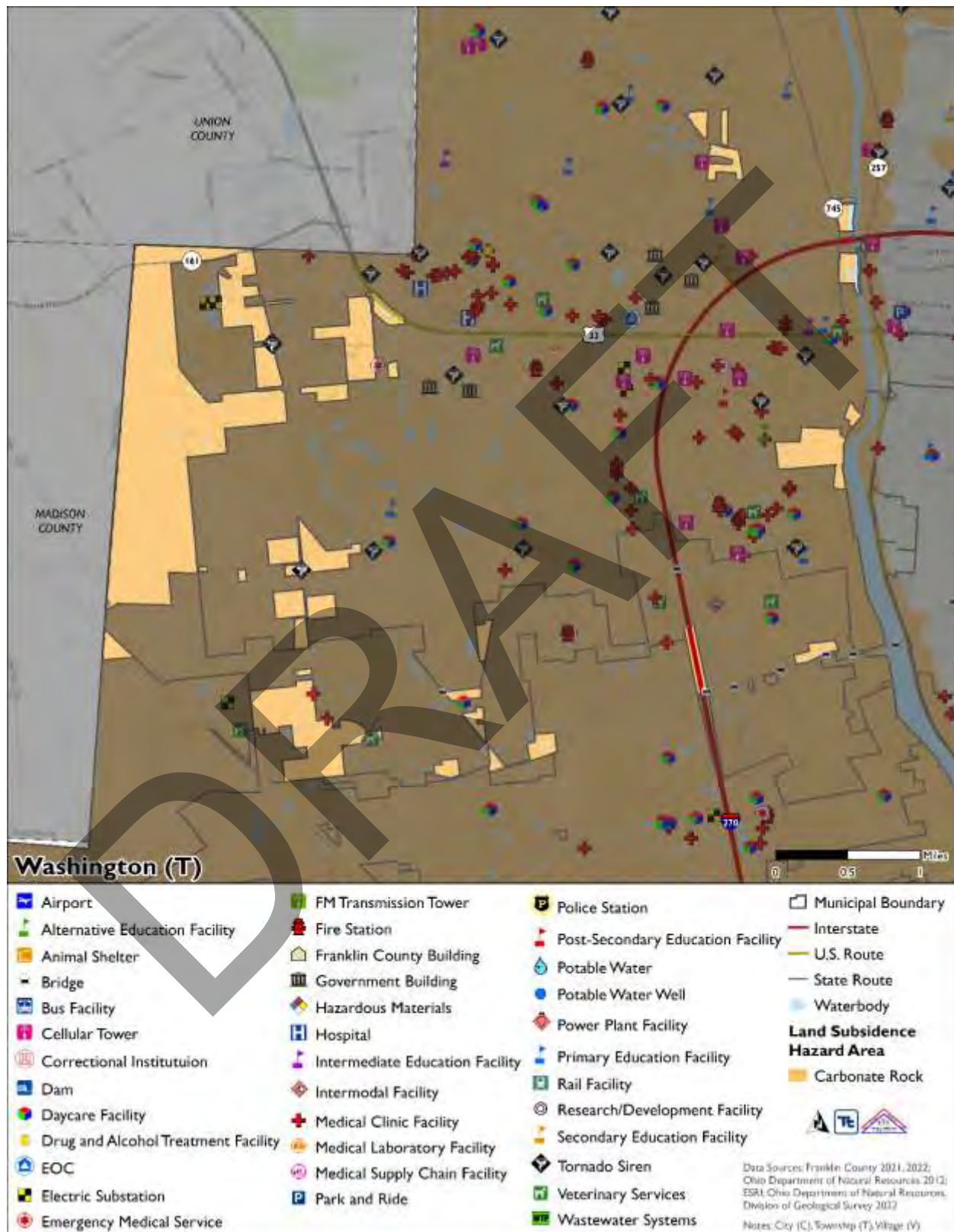


Figure 9.38-3. Washington Township Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Washington Township's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Washington Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.38-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	The Township did not experience any notable damages or losses.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The Township did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The Township did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The Township did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Washington Township. Washington Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.38-14. Hazard Ranking Input

Hazard of Concern	Ranking
Dam/Levee	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Extreme Temp	Low
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.38-15. Number of Critical Facilities and Community Lifelines in Hazard Areas In Washington Township

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	1	-
0.2-Percent Annual Chance Flood Event Hazard Area	1	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	1	1
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Washington Township identified the following vulnerabilities within its community:

- The Township stormwater drainage systems overflow and back up during flood and severe weather events.
- Washington Township does not have a certified Floodplain Administrator

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- The Township is experiencing issues with invasive species killing and outcompeting native species.
- The Township does not have a Climate Action/Resiliency/Sustainability Plan

9.38.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.38-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Conduct regular maintenance for drainage systems and flood control structures.	Franklin County Engineer/City of Dublin	In Progress	Yes	New stormwater drains have been installed along Rings Road between Cosgray and Churchman Roads during 2022	Washington Township secured funding and established a construction agreement with the Franklin County Engineer's Office to oversee construction.
Educating citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves.	Township Trustee's office	Ongoing	Yes	Ohio is subject to periods of extreme heat in the summer, and extreme cold during winter.	Washington Township utilizes our web and social media channels to provide educational information to residents. The WTFD organizes fan donations to give to needy, vulnerable populations during extreme heat.
Educating citizens regarding severe summer weather (thunderstorms, lightning, wind, tornado), shelter in place, evacuation etc.	Township Trustee's office	Ongoing	Yes	Central Ohio is subject to severe storms at varying times throughout the year.	Washington Township utilizes our web and social media channels to provide educational information to residents. We participate in designated severe storm awareness activities.
Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2,000 / 6 months)	Township Trustee's office	Ongoing	Yes	-	We need to check the status of this project.
Purchase Tornado Sirens through Franklin County Emergency Management & Homeland Security. (60,000 / 4 months)	Township Trustee's office	No Progress	No	A large part of our jurisdiction is covered by sirens maintained by the City of Dublin. Franklin County EMA has not reached out to us about the need for sirens in our area.	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Washington Township identified the following mitigation efforts completed since the last HMP:

- The Amlin area improvement project totaled over \$4.2 million and was funded by a variety of sources. The new lines were installed during 2022.

Since the adoption of the County's first HMP, Washington Township has made significant mitigation progress in the following areas:

- Education of citizens regarding severe summer weather through the use of social media and online web channels.
- Purchasing of NOAA weather alert radios for every hospital, park and recreation center, public utility facility large population venues, public/private schools and government buildings accessed by the public.

Proposed Hazard Mitigation Initiatives for the HMP Update

Washington Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.38-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	-	-	X	X	-	X	X	-	X
Disease Outbreak	X	-	-	X	X	-	X	X	-	X
Drought	X	-	-	X	X	-	X	X	-	X
Earthquake	X	-	-	X	X	-	X	X	-	X
Extreme Temp	X	-	-	X	X	-	X	X	-	X
Flood	X	X	-	X	X	X	X	X	-	X
Geologic (Erosion)	X	-	-	X	X	-	X	X	-	X
Invasive Species	X	-	-	X	X	X	X	X	-	X
Severe Summer Weather	X	X	-	X	X	X	X	X	-	X
Severe Winter Weather	X	X	-	X	X	X	X	X	-	X
Tornado	X	-	--	X	X	-	X	X	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.38-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Washington Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.38-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Washington Township-001	Stormwater Drainage Maintenance	Problem: The Township stormwater drainage systems overflow and back up during flood and severe weather events. Solution: The Township will work with Franklin County Engineer and the City of Dublin to install new stormwater drains along Rings Road.	Flood, Severe Summer Weather, Severe Winter Storm	1	1 year	Franklin County Engineer, City of Dublin, Washington Township	HMGP, FMA	Increase stormwater drains to reduce overflow during storm events	High	High	SIP	PP
2023-Washington Township-002	Establish Floodplain Administrator	Problem: Washington Township does not have a certified Floodplain Administrator Solution: The Township of Washington will work with Franklin County to establish a Floodplain Administrator and maintain certification once selected.	Flood	1	1 to 2 years	Washington Township, Franklin County	Local Budget	Reduce risk of loss of property in the floodplain	Low	High	LPR	PR
2023-Washington Township-003	All-Hazards Education Campaign	Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake,	2,4,5	1 to 2 years	Franklin County EM&HS, Washington Township	Local Budget	Increase awareness of potential hazard risks, reduce loss of	Low	High	EAP	PI, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards.	Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes					life and property				
2023-Washington Township-004	Invasive Species Eradication Program	Problem: The Township is experiencing issues with invasive species killing and outcompeting native species. Solution: The Township will work with state agencies on developing quarantine, control, and eradication programs for invasive species to protect native species.	Invasive Species	1	2 years	Washington Township	Local Budget, HMGP	The Township's native species will become better protected.	Local Budget	Medium	LPR	PP
2023-Washington Township-005	Develop Climate Action/Resiliency/Sustainability Plan	Problem: The Township does not have a Climate Action/Resiliency/Sustainability Plan Solution: The Township will work with Franklin County to develop a Climate Action Plan to address the on-going impacts of climate change on residents and	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards,	1,3	1 to 3 years	Washington Township, Franklin County	Local Budget, HMGP	Reduce the impacts of climate change on infrastructure and residents	Medium	High	LPR	PR, NR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		infrastructure, and natural resources.	Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes									

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	Community Rating System
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.38-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Washington Township-001	Drainage Maintenance	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2023-Washington Township-002	Establish Floodplain Administrator	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2023-Washington Township-003	All-Hazards Education Campaign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-Washington Township-004	Invasive Species Eradication Program	0	1	1	1	0	1	0	1	1	1	0	0	0	0	7	Medium
2023-Washington Township-005	Develop Climate Action/Resiliency/Sustainability Plan	1	1	1	1	0	1	1	1	1	1	1	1	1	1	13	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.39 CITY OF WESTERVILLE

This section presents the jurisdictional annex for the City of Westerville that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Westerville participated in the planning process, an assessment of the City of Westerville's risk and vulnerability, the different capabilities used in the City of Westerville, and an action plan that will be implemented to achieve a more resilient community.

9.39.1 Hazard Mitigation Planning Team

The City of Westerville identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Westerville departments, including the Fire Department and City Manager. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.39-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Brian Miller/Fire Chief	Name/Title:	Monica Irelan/City Manager/ExComm
Address:	21 S. State St. Westerville, Ohio 43081	Address:	21 S. State St. Westerville, Ohio 43081
Phone Number:	614-901-6400	Phone Number:	614-901-6400
Email:	Brian.miller@westerville.org	Email:	monica.irelan@westerville.org
NFIP Floodplain Administrator			
Name/Title:	Jeff Buehler		
Address:	64 East Walnut Street, Westerville OH, 43081		
Phone Number:	614-901-6659		
Email:	-		
Additional Contributors:			
Name/Title:		No additional contributors	
Method of Participation:			

9.39.2 Municipal Profile

The City of Westerville is in the northern area of Franklin County and is bordered by Blendon Township to the east and Sharon Township to the west and Columbus City to the south.

According to the American Community Survey, the 2021 population for the City was 29,933, a 17.13 percent decrease from the 2010 Census population of 36,120. Data from the 2021 American Community Survey indicates that 7 percent of the population is 5 years of age or younger and 19.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.39.3 Jurisdictional Capability Assessment and Integration

The City of Westerville performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Westerville to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Westerville and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.39-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible

Codes, Ordinances, & Regulations				
Building Code	Yes	2017 Ohio Building Code	State	Building Department
<i>How does this reduce risk?</i> Building code enforces minimum standards for life, safety and resiliency of the built environments. The Building Code has not been updated since the last HMP; therefore, it currently does not implement the HMP. During the next update, the City will review the HMP and implement the building code accordingly.				
Zoning/Land Use Code	Yes	1993-3	Local	Planning and Development
<i>How does this reduce risk?</i> Identifies any potential hazards including flood plain concerns, zoning concerns, making sure areas are zoned for appropriate uses including monitoring designated wetlands. The zoning/land use code has not been updated since the last HMP; therefore, it currently does not implement the HMP. During the next update, the City will review the HMP and implement the zoning/land use code accordingly.				
Subdivision Ordinance	Yes	1993-3	Local	Planning and Development
<i>How does this reduce risk?</i> These Regulations are adopted to: (1) Secure and provide for the public health, safety, comfort and general welfare. (2) Provide for growth and development in accordance with adopted plans, zoning regulations, policies and resolutions; (3) Provide safety from fire, flood and other danger; (4) Provide for efficient, adequate and economic drainage, storm water management, water and sanitary services, schools, open space and other public requirements and facilities; and (5) Provide for safe and convenient traffic circulation through the proper arrangement of streets or other highways in relation to existing or planned streets or highways.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	1993-3	Local	Planning and Development
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 1167	Local	Planning and Development
<i>How does this reduce risk?</i> It is the purpose of this chapter to promote and provide for the proper use and development of lands subject to periodic flooding and to encourage the development of such lands in a manner that will promote the public health, safety and general welfare of the residents of the City. The intent of this chapter is to secure safety from flooding, minimize flood damage to persons and property, minimize public expenditures for flood relief and flood control projects, and to reduce the height and violence of floods insofar as such are caused by any natural or artificial obstruction. In order to accomplish its purposes, this chapter includes methods and provisions for: (a) Restricting or prohibiting uses which are dangerous to health, safety and property due to flooding, or which result in damaging increases in erosion, in flood heights or in flood water velocity; (b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (c) Controlling the alteration of the flood plain, watercourse channels and natural protective barriers, which help accommodate or channel flood waters;				

<p>(d) Controlling the filling, grading, dredging and other development which may increase flood damage; and</p> <p>(e) Preventing or regulating the creation of floodway obstructions or encroachments which will unnaturally divert floodwaters or which may increase flood hazards in other areas.</p> <p>The City prohibits the following in the floodway: no building, structure or premises shall be used, and no building or structure shall be erected which is designed to be used for overnight accommodations by human inhabitants or any alteration of the floodway terrain through the shifting, addition or removal of material acting alone or in combination with other reasonably anticipated alterations would impair the designated floodway's ability to carry and discharge the waters resulting from the base flood is prohibited.</p> <p>Any new construction or substantial improvement in the floodplain requires that the lowest floor, including basement, elevated to or above the flood protection elevation.</p>				
Wellhead Protection	Yes	???	Local	Water Department
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	537.	Local	City Managers Office
<i>How does this reduce risk?</i>				
Plan created for disaster response, mitigation and recovery.				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Historic Preservation Ordinance	Local	
Planning Documents				
Comprehensive/Master Plan	Yes	Central College Area Plan Otterbein Master Plan North Westerville Plan Imagine Westerville Community Plan Westerville Road Area Plan		
<i>How does this reduce risk?</i>				
Identities future growth and redevelopment plans to include creating resilience in utility infrastructure conforming to current building and fire codes for life safety where applicable to build more resilient structures.				
Capital Improvement Plan	Yes	2022	Local	Finance Department
<i>How does this reduce risk?</i>				
General governmental projects (sidewalks, streets, bridges, etc., are accounted for within the General Capital Improvement Fund primarily funded by a distribution of income taxes and debt proceeds.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	93-12	Local	Planning and Development
<i>How does this reduce risk?</i>				
Makes sure no structures are built in the floodplain.				
Stormwater Management Plan	Yes	93-12	Local	Planning and Development
<i>How does this reduce risk?</i>				
EPA Compliant and makes sure tributaries are maintained to monitor and prevent erosion.				
Open Space Plan	Yes	PROS Master Plan	Local	Parks and Recreation
<i>How does this reduce risk?</i>				
The recommendations outlined in the PROS Master Plan are aligned with the vision, mission and core values of the community and the Department. These recommendations follow what the community has voiced as a priority. Overall, the capital improvements can be utilized as a guideline for future improvements and development with flexibility to be altered and updated as needed.				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-

<i>How does this reduce risk?</i>				
Economic Development Plan	Yes	Comprehensive Plan adopted July 2016	Local	Economic Development
<i>How does this reduce risk?</i> Multifaceted plan that covers development, new infrastructure and improving and or upgrading existing infrastructure to improve community safety and resiliency.				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	Yes	Central Ohio Transportation Authority (COTA)	County	COTA
<i>How does this reduce risk?</i> New software is currently in the works to keep COTA buses out of Hazard areas. COTA can also be used to evacuate residents if necessary and can also be used as temporary shelter for people affected by a disaster.				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	Yes	Uptown Plan Adopted March 6, 2014	Local	Planning and Development
<i>How does this reduce risk?</i> Multifaceted plan that covers development, new infrastructure and improving and or upgrading existing infrastructure to improve community safety and resiliency.				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Plan is updated annually	Local	Fire Division
<i>How does this reduce risk?</i> <i>Consider the following:</i> <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? 				
Continuity of Operations Plan	Yes	Part of the EMP	Local	Fire Division
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Franklin County List of Potential Threats/Disasters	County	EMA
<i>How does this reduce risk?</i>				

Helps for local planning purposes to identify threats and how the City of Westerville can plan and prepare for responding to these types of incidents.				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	Yes	???	County	Health
<i>How does this reduce risk?</i>				
<i>Identifies public health emergencies and places funding and strategies to address these emergencies.</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Westerville to oversee and track development.

Table 9.39-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Building Department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Westerville and their current responsibilities that contribute to hazard mitigation.

Table 9.39-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Planning Commission is a seven-member board that holds public hearings on land use proposals such as subdivision plans and rezoning requests. The Commission also hears and reviews plans for new office and commercial land development and provides a forum for public discussion of plans and proposed development regulations. The seven members consist of six citizen volunteer appointees and one member designated by and representing City Council.
Zoning Board of Adjustment	Yes	The Board of Zoning Appeals (BZA) is a seven-member board that hears and decides primarily zoning variances (e.g., setback encroachment) and temporary use permits (e.g.,

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		sales trailer). The Board is also responsible for the hearing and disposition of appeals from any order or decision made by a City administrative officer in enforcing the zoning ordinance.
Planning Department	Yes	Includes, Building Department, Engineers, Planning, Code Enforcement
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	PROS Board: A four-time National Recreation and Park Association (NRPA) Gold Medal winner, Westerville Parks & Recreation is one of only 117 accredited agencies in the U.S.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Service Department
Construction/Building/Code Enforcement Department	Yes	The Building Division uses modern codes, industry standards and City ordinances to ensure the protection of life, health, property and general welfare of the citizens of Westerville. We issue permits for all construction and renovation projects, such as electrical, plumbing and HVAC systems.
Emergency Management/Public Safety Department	Yes	Fire, Police and Communications Staff
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Reverse 911, Everbridge, Franklin County Siren System can be activated by our Communications Center
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Service Department and Electric Division; The City of Westerville maintains the storm water collection system through a series of Best Management Practices. These BMPs are listed as a part of the NPDES Stormwater Management Plan.
Mutual aid agreements	Yes	Police, Fire, Electric Divisions all have Mutual Aid Agreements with Surrounding Communities.
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning and Development Staff
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building Department Staff
Planners or engineers with an understanding of natural hazards	Yes	Planning and Development Staff
Staff with expertise or training in benefit/cost analysis	Yes	Administrative Services/Procurement Staff
Professionals trained in conducting damage assessments	Yes	Building Department and Fire Department Staff
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Information Systems GIS department Staff
Environmental scientist familiar with natural hazards	No	Contracted Out
Surveyor(s)	No	Contracted Out
Emergency Manager		-
Grant writer(s)	No	Consider the following: Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
How do your administrative/technical capabilities contribute to risk reduction in your community? Utilizing the departments listed above our Staff all work together to identify hazards through our planning and development review processes which includes all departments reviewing site proposals and building proposals to identify and mitigate potential hazards before construction begins.		

Fiscal Capability

The table below summarizes financial resources available to the City of Westerville.

Table 9.39-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Westerville.

Table 9.39-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Community Affairs – Handles Social Media and other communications to the Community
Personnel skilled or trained in website development	Yes	Community Affairs
Hazard mitigation information available on your website	Yes	As needed
Social media for hazard mitigation education and outreach	Yes	Messages sent out as needed
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Reverse 911 if needed
Natural disaster/safety programs in place for schools	Yes	Meet with Schools for Disaster Preparedness including tabletop scenarios and ICS training.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Fire Department goes over Disaster Preparedness at Public events.

Community Classifications

The table below summarizes classifications for community programs available to the City of Westerville.

Table 9.39-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	N/A	N/A
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	ISO Class 1	
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.39-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.39.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Westerville.

Table 9.39-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Westerville (C)	30	17	\$292,464.51	2	0

Sources: a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Westerville.

Table 9.39-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	From Schrock Road along Park Meadow to Interstate 270.
<ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Areas next to Alum Creek Yes
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction?	No
<ul style="list-style-type: none"> If so, state what projects are underway. How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	N/A
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	Yes
<ul style="list-style-type: none"> If not, state why. 	
NFIP Compliance	
What local department is responsible for floodplain management?	Planning and Development
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No

NFIP Topic	Comments
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	We review permits to make sure no construction happens in the flood plain.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Change of Occupancy permits, and the building department determines if extent of any renovation requires permits. The Fire Division also conducts annual fire inspections of all commercial properties and reports any renovations to the building department for review.
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	Not aware of any
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	Chapter 1167 1993
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Unknown
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	All new development goes through Our Planning and Development Department to make sure zoning is followed. Engineers within Planning and Development also monitor stormwater runoff plans and proposals.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Unknown at this time.

9.39.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.39-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	52	0	45	0	50	0	12	0	2	0
Multi-Family	2	0	8	0	5	0	4	0	0	0
Other (commercial, mixed-use, etc.)	1	0	11	0	22	0	14	0	5	0
Total Permits Issued	901	0	796	0	754	0	734	0	782	0

Table 9.39-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.39.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Westerville's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Westerville has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.39-1. City of Westerville Hazard Area Extent and Location Map-Flood

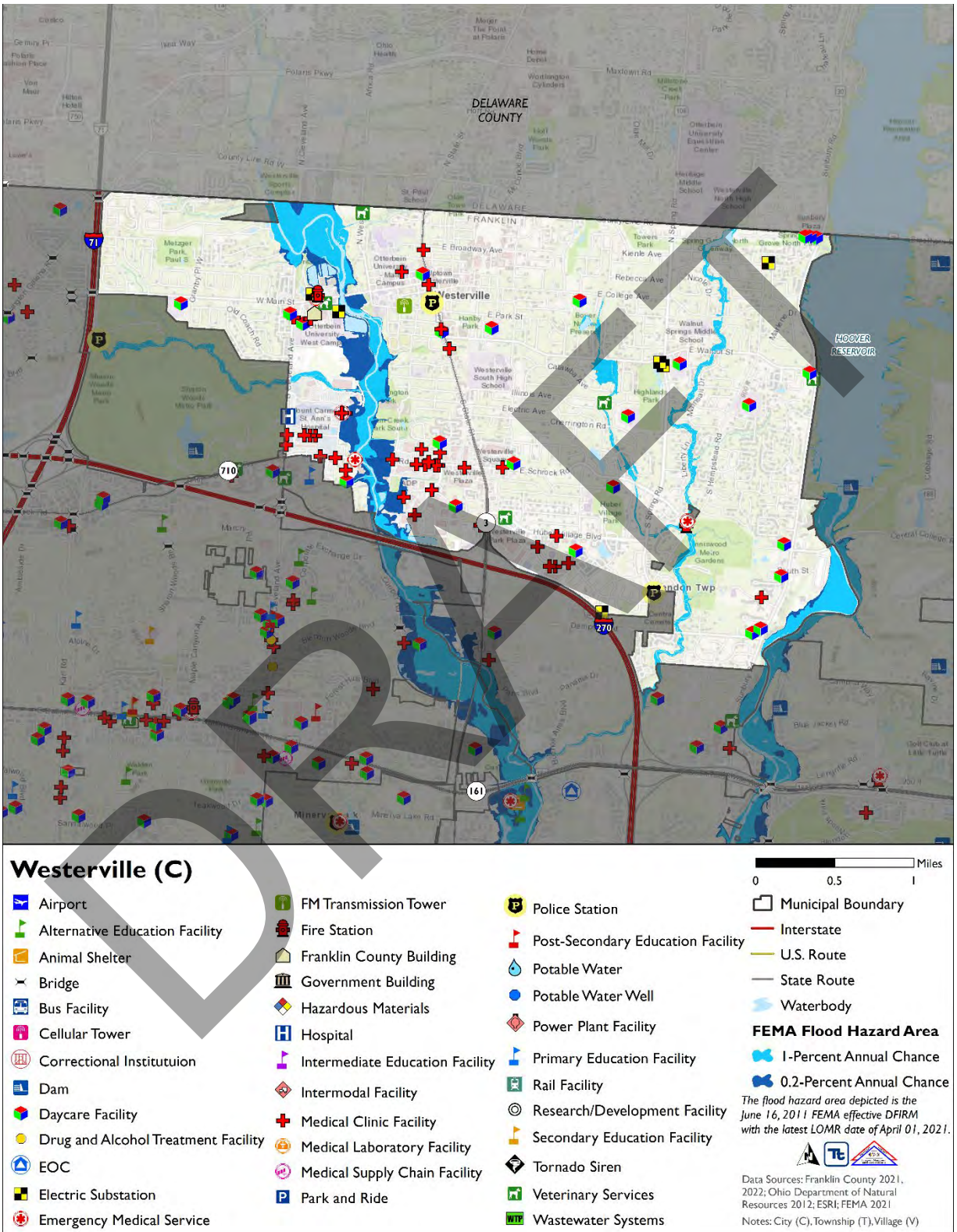


Figure 9.39-2. City of Westerville Hazard Area Extent and Location Map-Inland Erosion

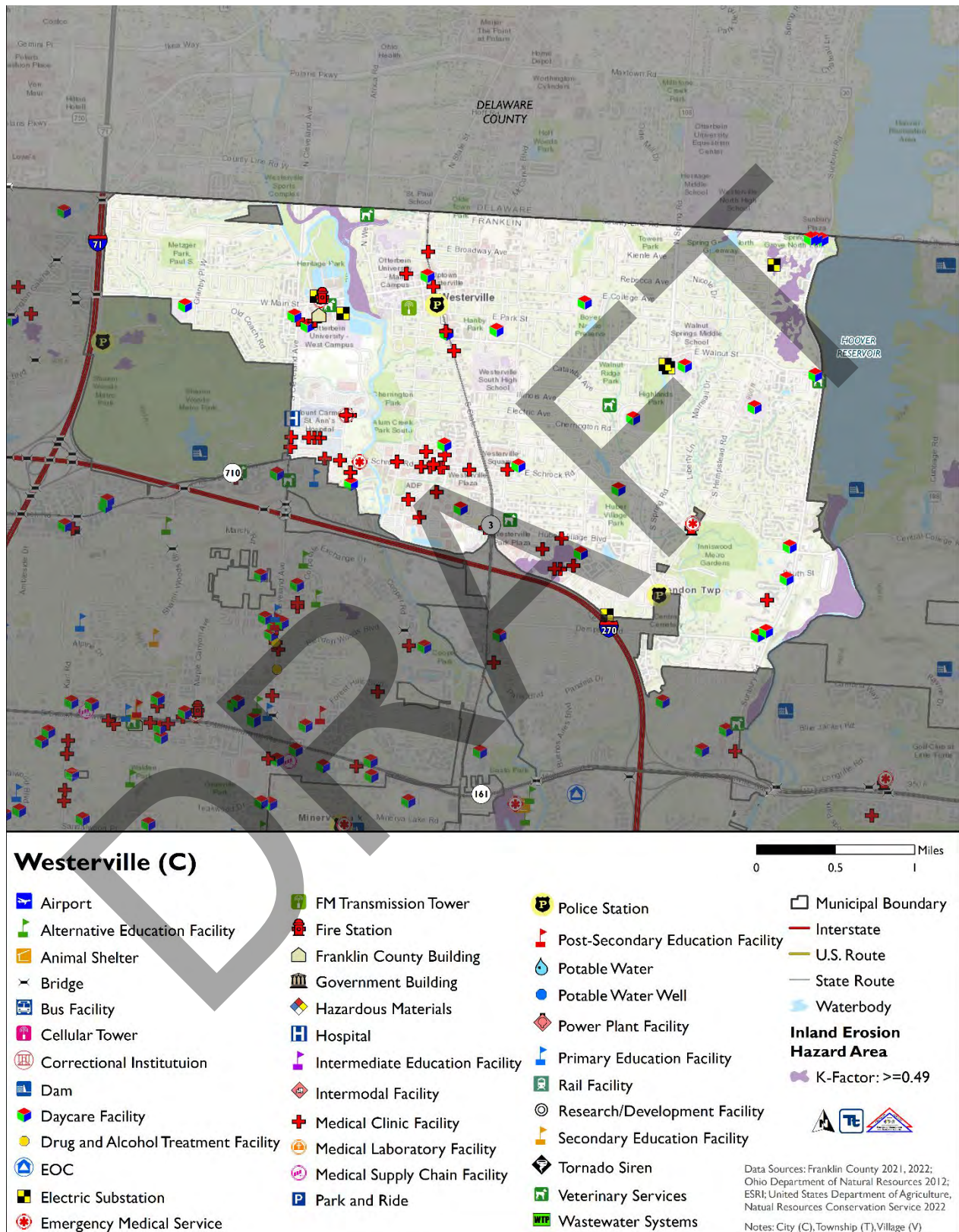
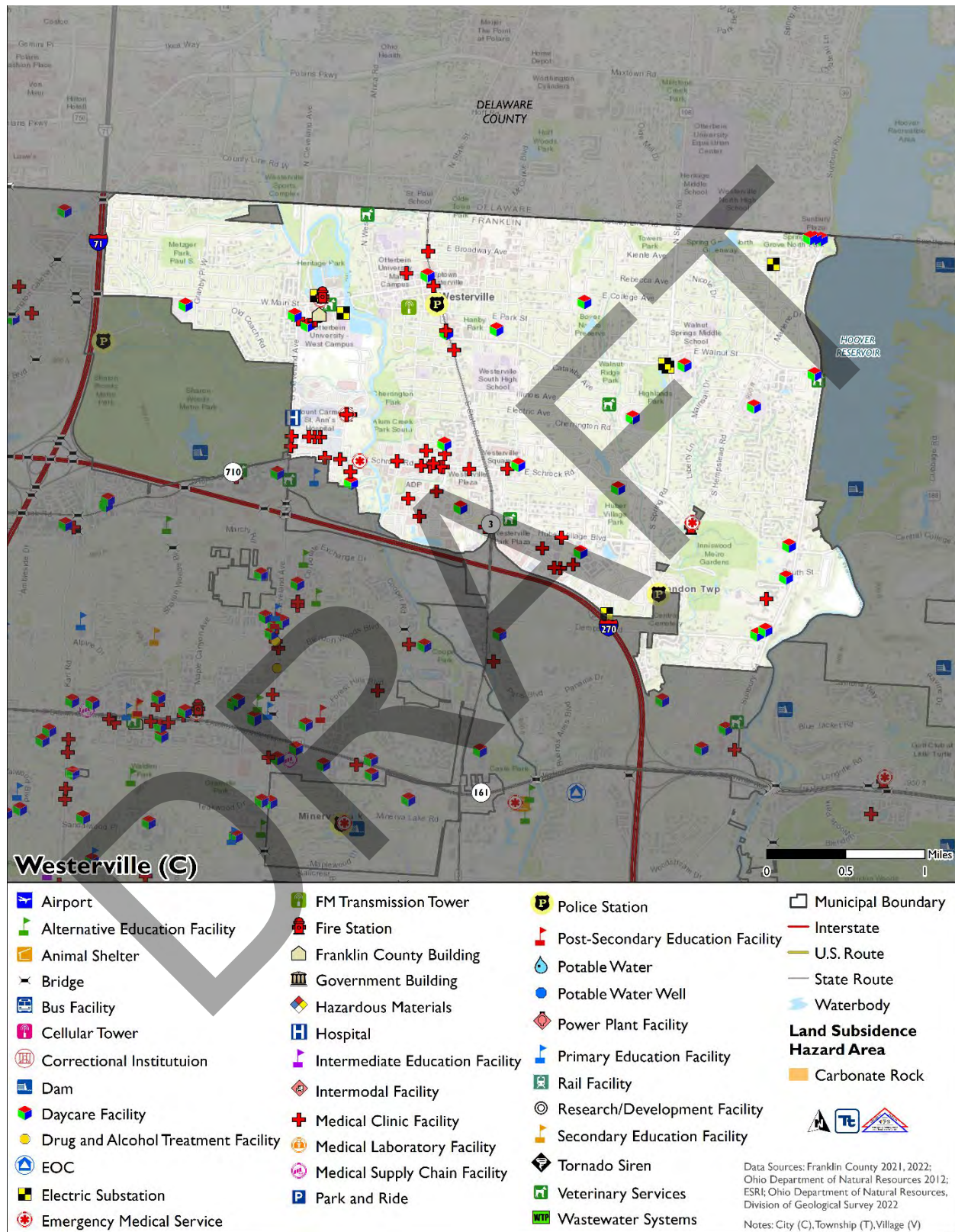


Figure 9.39-3. City of Westerville Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Westerville's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Westerville experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.39-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City of Westerville did not incur any additional losses or damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City of Westerville did not incur any additional losses or damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City of Westerville did not incur any additional losses or damages.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Westerville. The City of Westerville reviewed the County hazard risk/vulnerability risk ranking table and individual

Table 9.39-14. Hazard Ranking Input

Hazard	Rankings
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.39-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Westerville

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	11
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	2
Subsidence (Karst/Carbonate Rock) Hazard Area	1	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	50
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Westerville identified the following vulnerabilities within its community:

- The City of Westerville does not have generators installed in all of their critical facilities and emergency shelters which hinders them from operating during hazard events.
- There is a lack of public awareness of the magnitude of a potential hazard events. Develop public service announcements (PSAs) about increasing hazard potential.
- The City has experienced an increase in debris present in the streams in public areas, i.e. parks.
- The bridges at Schrock and Main are not up-to-date and are undersized.
- Westerville currently lacks a stormwater utility to assess fees and use the revenue to maintain infrastructure relating to stormwater flooding.
- Knowledge is lacking from City residents about the locations of shelters to be used during a storm event.

- There is a lack of a reliable warning system with total coverage as it relates to lightning especially in public areas like parks and pools. Install lightning prediction and protection systems throughout public areas.
- There is a lack of backups for traffic lights at critical intersections after a storm event. This can create secondary traffic incidents.
- The City experiences issues in relation to winter weather. Snowstorms result in an inability to travel and also in residents not adhering to snow emergency warnings.
- The City experiences communication and utility disruptions both during and after a hazard events. This hinders first responders' ability to respond in a timely fashion.
- The City residents are uneducated in terms of the effects that climate change is having and will have on the hazards of concern.
- Areas like the Huber area, Spring Grove, and areas north of the Franklin County line, currently do not have watercourse easements, which hinders the City from accessing water lines and drainage/water sources.
- Some utility poles within the City are overburdened with utility lines., making them a potential risk to life, safety and property.
- There is a lack of safe spots in public areas, especially parks, when a hazard event strikes the City.
- There is a potential for reduction in revenues due to the after-effects of some hazard events.
- The City has heard of concerns that exist about private use of groundwater for irrigation purposes (tapping of aquifers for sprinkling systems).
- Public education is lacking on the Drought Disaster Plan produced by the Westerville Water Department. PSA on existing Drought Disaster Plan.
- Westerville City has two repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- All municipalities need to work with FCEMHS and MORPC to educate residents on the effect of climate change on infrastructure that was not built to handle the intensity of storms now occurring more frequently. What used to be a 100, 250, 500 year storm level is now happening more regularly. Residents don't seem to understand what is going on and their need to better prepare as a result of it.*

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.39.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.39-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Install generators for critical infrastructure and emergency shelters	City	Ongoing	Yes	We continue to add Emergency Generators in City Buildings and Schools which can be used as emergency shelters.	City Departments and Westerville City Schools.
Spring Run and County Line Run have erosion issues due to extreme rainfall events. Study mitigation alternatives.	City	Complete	No	-	-
There is a net loss of the floodplain due to increased development. Discourage development that creates a net loss of the floodplain.	Mayor's Office	Complete	No	-	-
There is a lack of public awareness of the magnitude of a potential flood event. Develop public service announcements (PSAs) about flooding potential.	Mayor's Office	Ongoing	Yes	Continue to use Social Media to create disaster preparedness.	Community Affairs
There is debris present in the streams in public areas, i.e. parks. Develop a preventative maintenance program.	Mayor's Office	Ongoing	Yes	-	Parks and Recreation/Service Department
Critical facilities exist in the floodplain. Seek funding to relocate or floodproof structures within the floodplain. (\$5,000)	Mayor's Office	Ongoing	Yes	Continue to monitor flood maps for changes.	Planning and Development
The bridges at Schrock and Main are not up-to-date and are undersized. Undertake an engineering study to determine adequate floodway size.	Mayor's office	No Progress	Yes	Floodwaters have reached the bottom of the bridge	Service Department/Franklin County Engineer
Westerville currently lacks a stormwater utility. Develop a stormwater utility.	Mayor's office	No Progress	Yes	-	Service Department
Knowledge is lacking about the locations of shelters to be used during a storm event. Establish and identify a shelter network. Develop a PSA regarding the location of pre- and post storm shelters. (\$5,000)	Mayor's office	No Progress	Yes	Continue to work with Schools and American Red Cross to identify shelters.	Fire Division and Community Affairs

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
There is a lack of a reliable warning system with total coverage as it relates to lightning especially in public areas like parks and pools. Install lightning prediction and protection systems throughout public areas.	Mayor's office	No Progress	Yes	Continue to monitor effectiveness of the system and consider expansion of the system in parks.	Parks and Recreation
There is a lack of backups for traffic lights at critical intersections after a storm event. Install backup sources for critical intersection lights. (\$100,000)	Mayor's office	No Progress	Yes	Continue to explore options for signals	Electric Division
Snowstorms result in an inability to travel and also in residents not adhering to snow emergency warnings. Develop a plan to address transportation issues and research the potential for intelligent traffic systems. Increase enforcement during snow emergencies. (\$7,500)	Mayor's office	Ongoing	Yes	Explore use of Opticom for snowplows	Service Department
Communications and utilities are disrupted both during and after a tornado. Bury utility lines and evaluate the possibility of a wireless network. (\$20,000,000)	Mayor's office	Ongoing	Yes	Continue to provide Fiber infrastructure	WeConnect
Severe storms have the potential to cause power outages across the city. Explore the following possibilities: backup generators, fuel cell network, alternative energy sources, burying utility lines, undertaking an assessment of mechanical load on aboveground utilities (i.e. poles).	Mayor's office	Ongoing	Yes	Continue to bury electric lines in new residential developments. Continue to add Generators to City Facilities and Schools.	Electric, All City Departments, and Westerville City Schools.
Bradford pear trees are an issue throughout the city each time that there is a storm event due to damage by wind, lightning, hail, etc. Implement a replacement program for Bradford pear trees for both public and private property and update the tree assessment. (\$35,000/year)	Mayor's office	Ongoing	No	800 trees left in the City Expect to have mitigated over the next 20 years. Current Trees are stable and do not pose an immediate threat	Parks and Recreation
There is a need to implement watercourse easements citywide. Areas like the Huber area, Spring Grove, and areas north of the Franklin County line, currently do not have watercourse	Mayor's office	No Progress	Yes	Tried to purchase easements from residents through Federal Funding. Residents denied selling easements.	Planning and Development

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
easements. Develop a citywide watercourse protection ordinance.					
Some utility poles within the city are overburdened with utility lines. Undertake a vulnerability assessment on utility poles. (\$175,000)	Mayor's office	Ongoing	Yes	Electric Division continues to Monitor the Electric Poles.	Electric Division
There is a lack of safe spots in public areas, especially parks. Build shelters and establish a shelter network. Seek funding for multi-use facilities in public places. (\$600,000)	Mayor's office	Ongoing	Yes	Add shelters as needed.	Parks and Recreation
There is a potential for reduction in revenues due to the after-effects of tornadoes. Work with the Chamber of Commerce for business continuity for smaller businesses.	Mayor's office	Ongoing	Yes	Continue to work with the Chamber to identify areas where businesses can get back up and running after a disaster.	Economic Development
Concerns exist about private use of groundwater for irrigation purposes (tapping of aquifers for sprinkling systems). Investigate groundwater usage	Mayor's office	Ongoing	Yes	-	Water Department
Public education is lacking on the Drought Disaster Plan produced by the Westerville Water Department. PSA on existing Drought Disaster Plan. Use existing tools to provide public education: magazine, calendar, water quality report, website. Seek funding to enhance billing system to educate the public on the plan.	Mayor's Office	Ongoing	Yes	-	Water Department

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Westerville identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Westerville has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.39-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	-	-	X	-	X	X
Disease Outbreak	X	X	-	X	-	-	X	-	-	X
Drought	X	X	-	X	-	-	X	-	-	X
Earthquake	X	X	-	X	X	-	X	-	X	X
Extreme Temp	X	X	-	X	X	-	X	-	X	X
Flood	X	X	X	X	X	X	X	X	X	X
Geologic	X	X	-	X	X	-	X	-	X	X
Invasive Species	X	X	-	X	-	-	X	-	-	X
Severe Summer Weather	X	X	-	X	X	X	X	-	X	X
Severe Winter Weather	X	X	-	X	X	X	X	-	X	X
Tornado	X	X	-	X	X	-	X	-	X	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.40-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Westerville will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.39-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Westerville-001	Generators	<p>Problem: The City of Westerville does not have generators installed in all of their critical facilities and emergency shelters which hinders them from operating during hazard events.</p> <p>Solution: The City will continue to install generators for critical infrastructure and emergency shelters after conducting a generator study.</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado	2	Less than 5 years	City Departments and Westerville City Schools	FMA, BRIC, HMGP, City Budget	The City will be able to perform continuity of operations during hazard events	> \$100,000 per generator	High	SIP	ES
2023-City of Westerville-002	Social Media Disaster Preparedness	<p>Problem: There is a lack of public awareness of the magnitude of a potential hazard events. Develop public service announcements (PSAs) about increasing hazard potential.</p> <p>Solution: The City will continue to use Social Media to create disaster preparedness and ensure it is distributed</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species	5	Ongoing	Community Affairs	City Budget	The City residents will become more knowledgeable about hazards	Staff time	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Severe Summer Weather Severe Winter Weather Tornado									
2023-City of Westerville-003	Debris Maintenance Program	<p>Problem: The City has experienced an increase in debris present in the streams in public areas, i.e. parks.</p> <p>Solution: The City will develop a preventative debris maintenance program as well as a routine stream debris cleanout program.</p>	Flood	3	Ongoing	City Administration	City Budget, FMA	The City should experience reduced flooding.	\$30,000/yr	High	NSP	NR
2023-City of Westerville-004	Bridge Study	<p>Problem: The bridges at Schrock and Main are not up-to-date and are undersized.</p> <p>Solution: The City will undertake an engineering study to determine adequate floodway size and will install properly sized bridges.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	City Administration	City Budget, FMA, CDBG, HMGP, BRIC	The city will have useable and reliable bridges that are up to date	TBD by Engineer Study	High	SIP	SP
2023-City of Westerville-005	Stormwater Utility	<p>Problem: Westerville currently lacks a stormwater utility to assess fees and use the revenue to maintain infrastructure relating to stormwater flooding.</p> <p>Solution: The City will develop a stormwater utility to levee fees to control stormwater related flooding.</p>	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 years	Service Department	City Budget, FMA	The City will have better stormwater infrastructure	Staff Time	High	LPR	PR
2023-City of Westerville-006	Shelter Network	<p>Problem: Knowledge is lacking from City residents about the locations of shelters to be used during a storm event.</p>	Dam/Levee Disease Outbreak Drought Earthquake	5	2 Years	Mayors office, Service Department	City Budget	City residents will become more knowledgeable	\$5,000	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will establish and identify a shelter network. The City will also develop a PSA regarding the location of pre- and post storm shelters.	Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado					about shelter options				
2023-City of Westerville-007	Lightning Protection System	Problem: There is a lack of a reliable warning system with total coverage as it relates to lightning especially in public areas like parks and pools. Install lightning prediction and protection systems throughout public areas. Solution: The City will install a lightning warning system to alert residents of incoming storms that may contain lightning.	Severe Summer Weather	5	Less than 5 years	Service Department	HMGP, City Budget	City residents will be more prepared against lightning	\$1,000 per detector	High	EAP	PI
2023-City of Westerville-008	Traffic Light Generators	Problem: There is a lack of backups for traffic lights at critical intersections after a storm event. This can create secondary traffic incidents. Solution: The City will conduct a study to evaluate the correct sized generators needed and will install backup sources for critical intersection lights.	Dam/Levee Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather	6	Less than 5 years	Electric Division	HMGP, BRIC, City Budget	City residents will be able to travel safely during power outages	\$100,000	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
			Tornado									
2023-City of Westerville-009	Winter Weather Preparedness	<p>Problem: The City experiences issues in relation to winter weather. Snowstorms result in an inability to travel and also in residents not adhering to snow emergency warnings.</p> <p>Solution: The City will develop a plan to address transportation issues and research the potential for intelligent traffic systems and will increase enforcement during snow emergencies.</p>	Severe Winter Weather	5	Less than 5 Years	City Administration	HMGP, City Budget	City residents will be able to travel safely during winter weather	\$7,500	High	EAP	PR
2023-City of Westerville-010	Utility Study	<p>Problem: The City experiences communication and utility disruptions both during and after a hazard events. This hinders first responders' ability to respond in a timely fashion.</p> <p>Solution: The City will conduct a study to see if burying utility lines or evaluating the possibility of a wireless network is a possibility.</p>	Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather Tornado	6	Less than 5 years	City Administration	HMGP, BRIC, City Budget	The City will be able to keep up communication during hazard events.	\$20,000,000	High	SIP	SP
2023-City of Westerville-011	Climate Change Education	<p>Problem: The City residents are uneducated in terms of the effects that climate change is having and will have on the hazards of concern.</p> <p>Solution: The City will create informative social media posts, website updates and work towards implementing a climate</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic	5	Less than 3 years	City Administration	City Budget	The City residents will be more knowledgeable about climate change impacts	Staff Time	High	LPR	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		change ordinance/plan to educate the residents.	Invasive Species Severe Summer Weather Severe Winter Weather Tornado									
2023-City of Westerville-012	Watercourse Easements	<p>Problem: Areas like the Huber area, Spring Grove, and areas north of the Franklin County line, currently do not have watercourse easements, which hinders the City from accessing water lines and drainage/water sources.</p> <p>Solution: The City will implement watercourse easements citywide. Additionally, the City will develop a citywide watercourse protection ordinance.</p>	Flood, Severe Summer Weather, Severe Winter Weather	4, 6	Less than 4 years	Property owners, City Administration	City Budget	The City will have access to water courses on other properties	\$1,000	High	LPR	PP
2023-City of Westerville-013	Utility Pole Vulnerability Assessment	<p>Problem: Some utility poles within the City are overburdened with utility lines., making them a potential risk to life, safety and property.</p> <p>Solution: The City will undertake a vulnerability assessment on all utility poles and determine which need to be replaced with the help of an engineer.</p>	Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather Tornado	6	Less than 5 years	City Administration	CDBG, BRIC, HMGP, City Budget	The City will have safe utility poles that can safely hold utility lines up.	\$175,000	High	SIP	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Westerville-014	Shelter Network	<p>Problem: There is a lack of safe spots in public areas, especially parks, when a hazard event strikes the City.</p> <p>Solution: The City will build shelters and establish a shelter network. The City will seek funding for multi-use facilities in public places.</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado	5	Less than 5 years	City Administration	CDBG, BRIC, HMGP, City Budget	The City will have an extensive shelter network to protect residents	\$600,000	High	SIP	SP
2023-City of Westerville-015	Business Continuity	<p>Problem: There is a potential for reduction in revenues due to the after-effects of some hazard events.</p> <p>Solution: The City will work with the Chamber of Commerce for business continuity for smaller businesses to develop a plan for how small businesses should handle the after effects of a hazard event.</p>	Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado	4	Less than 4 years	City Administration, Chamber of Commerce	City Budget	The City will have a plan for continuity of operations for small businesses.	Staff Time	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Westerville-016	Groundwater Study	Problem: The City has heard of concerns that exist about private use of groundwater for irrigation purposes (tapping of aquifers for sprinkling systems). Solution: The City will investigate and document groundwater usage so that residents are aware of available water.	Drought	3	Less than a year	City Administration	City Budget	The City will have an inventory of groundwater usage.	Staff time	High	LPR	PI
2023-City of Westerville-017	Drought Education and Development	Problem: Public education is lacking on the Drought Disaster Plan produced by the Westerville Water Department. PSA on existing Drought Disaster Plan. Solution: The City will use existing tools to provide public education: magazine, calendar, water quality report, website. Seek funding to enhance billing system to educate the public on the plan.	Drought	5	Less than a year	City Administration	HMGP, City Budget	The City will be more knowledgeable about the drought disaster plan.	Staff time	High	LPR	PI
2023-City of Westerville-018	Repetitive Loss Mitigation	Problem: Westerville City has two repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	The Repetitive loss structures will no longer flood as frequently.	>\$100,000 per property	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		areas that experience frequent flooding (high risk areas).										

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.39-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Westerville-001	Generators	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Westerville-002	Social Media Disaster Preparedness	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Westerville-003	Debris Maintenance Program	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2023-City of Westerville-004	Bridge Study	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-City of Westerville-005	Stormwater Utility	0	1	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2023-City of Westerville-006	Shelter Network	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-City of Westerville-007	Lightning Protection System	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Westerville-008	Traffic Light Generators	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Westerville-009	Winter Weather Preparedness	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2023-City of Westerville-010	Utility Study	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-City of Westerville-011	Climate Change Education	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Westerville-012	Watercourse Easements	1	1	1	1	1	1	1	1	1	0	1	1	1	0	12	High
2023-City of Westerville-013	Utility Pole Vulnerability Assessment	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Westerville-014	Shelter Network	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2023-City of Westerville-015	Business Continuity	0	0	1	1	1	1	1	1	1	1	1	1	1	1	12	High
2023-City of Westerville-016	Groundwater Study	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Westerville-017	Drought Education and Development	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Westerville-018	Repetitive Loss Mitigation	1	1	0	1	1	1	0	1	1	1	1	1	1	0	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.40 CITY OF WHITEHALL

This section presents the jurisdictional annex for the City of Whitehall that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Whitehall participated in the planning process, an assessment of the City of Whitehall's risk and vulnerability, the different capabilities used in the City of Whitehall, and an action plan that will be implemented to achieve a more resilient community.

9.40.1 Hazard Mitigation Planning Team

The City of Whitehall identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Whitehall departments, including the Mayor. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.40-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Kim Maggard/Mayor/ExComm	Name/Title:	-
Address:	21 S. State Street Westerville, Ohio 43081	Address:	-
Phone Number:	614-901-6400	Phone Number:	-
Email:	kim.maggard@whitehall-oh.us	Email:	-
NFIP Floodplain Administrator			
Name/Title:	Zachary Woodruff, Economic Dev and Public Service Director		
Address:	360 South Yearling Road, Whitehall OH, 43213		
Phone Number:	614-338-3103		
Email:			
Additional Contributors:			
Name/Title:	No additional contributions		
Method of Participation:			

9.40.2 Municipal Profile

The City of Whitehall is in the eastern center of Franklin County. The City is surrounded by the City of Columbus in entirety. It is in close proximity to John Glenn Columbus International Airport. The 338th Army Band is stationed there at the Defense Supply Center, Columbus.

According to the American Community Survey, the 2021 population for the City was 20,004, a 10.75 percent increase from the 2010 Census population of 18,062. Data from the 2021 American Community Survey indicates that 7.4 percent of the population is 5 years of age or younger and 10.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.40.3 Jurisdictional Capability Assessment and Integration

The City of Whitehall performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Whitehall to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Whitehall and provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.40-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part 13-2014	Local	Building Department
<i>How does this reduce risk?</i> Plans shall be required for any and all buildings having more than 200 square feet of floor or foundation area. All plans shall be drawn to scale with enough clarity to indicate the nature and extent of the work proposed and show in detail that it shall conform to the provisions of this Code and all relevant laws, ordinances, rules and regulations.				
Zoning/Land Use Code	Yes	Part 11-1995	Local	Zoning and Planning
<i>How does this reduce risk?</i> When interpreting and applying the provisions of this Zoning Code, they shall be held to be the minimum requirements adopted for the promotion of the public health, safety, comfort, convenience and general welfare.				
Subdivision Ordinance	Yes	Chapter 1101-1966	Local	
<i>How does this reduce risk?</i> "Subdivision" means the division of a tract or parcel of land shown as a unit or as contiguous units on the last preceding tax roll, into two or more lots, plots or other divisions of land, any of which is less than five acres, for the purpose, whether immediate or future, of transfer of ownership or building development. The following divisions of land shall not be construed to be a subdivision: (a) Partition of land into parcels of more than five acres not involving any new streets or easements of access. (b) The sale or exchange of parcels between adjoining lot owners, where such sale or exchange does not create additional building sites. (c) The improvement of one or more parcels of land for residential, commercial or industrial structures or group structures involving the divisions or allocations of land for the opening, widening or extension of any street or streets or as easements for extensions and maintenance of public sewers, water, storm drainage or other public facilities. (d) The dedication of streets or easements without the division of land. However, such dedication for street or easement purposes must be approved by the Planning Commission before any plot is accepted or approved.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Climate Change Ordinance <i>How does this reduce risk?</i>	No	-	-	-
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan <i>How does this reduce risk?</i> Discourages development in hazard areas.	Yes	July 2016	Local	Planning
Capital Improvement Plan <i>How does this reduce risk?</i> Allocates money towards various projects.	Yes	2022-2026	Local	Finance
Disaster Debris Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Floodplain Management or Watershed Plan <i>How does this reduce risk?</i>	No	-	-	-
Stormwater Management Plan <i>How does this reduce risk?</i> The City of Westerville maintains the storm water collection system through a series of Best Management Practices. These BMPs are listed as a part of the NPDES Stormwater Management Plan. The storm water collection system consists of the curb inlets, catch basins, manholes, channels, and retention/detention basins that convey the rain water runoff throughout the City of Westerville. Flood level control is managed by a cooperative effort between the City of Westerville's Engineering Department and Department of Public Service, The Office of the Franklin County Engineer, the Office of the Delaware County Engineer, the City of Columbus and the United States Corp of Engineers.	Yes	2021-2025	Local	Planning
Open Space Plan <i>How does this reduce risk?</i>	No	-	-	-
Urban Water Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Habitat Conservation Plan <i>How does this reduce risk?</i>	No	-	-	-
Economic Development Plan <i>How does this reduce risk?</i>	No	-	-	-
Shoreline Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Wildfire Protection Plan <i>How does this reduce risk?</i>	No	-	-	-
Community Forest Management Plan <i>How does this reduce risk?</i>	No	-	-	-
Transportation Plan <i>How does this reduce risk?</i>	No	-	-	-
Agriculture Plan <i>How does this reduce risk?</i>	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Whitehall to oversee and track development.

Table 9.40-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Building Department
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	N/A	-
Do you have a buildable land inventory? • If yes, please describe	N/A	-

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Whitehall and their current responsibilities that contribute to hazard mitigation.

Table 9.40-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Planning Commission is empowered to "conduct studies and surveys, and prepare plans, reports, and maps relative to the overall planning of the growth, development, redevelopment, rehabilitation, and renewal of the City..."
Zoning Board of Adjustment	Yes	The Board of Zoning and Building Appeals (BZBA) is charged with hearing and deciding appeals for exceptions to and variances in the City's Planning and Zoning Code and Building Code.
Planning Department	Yes	The Planning and Development Department is responsible for all aspects of development of the physical environment within the City of Westerville. The department consists of the Building, Engineering, Enforcement and Planning & Zoning divisions which through the development review process ensure that changes to the physical environment conform to adopted plans, laws, policies, professional standards, community expectations, and Board or Commission approvals.
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Development Department is here to help give businesses of all sizes the opportunity to minimize costs and maximize growth.
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	Yes	Code Enforcement is the prevention, detection, investigation and enforcement of violations of statutes or ordinances regulating public health, safety, and welfare, public works, business activities and consumer protection, building standards, land-use, or municipal affairs.
Emergency Management/Public Safety Department	Yes	The director of Public Safety is the administrative head of the public safety forces in Whitehall.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	IPAWS
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Public service department runs numerous maintenance programs.
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	-	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Engineers or professionals trained in building or infrastructure construction practices	-	-
Planners or engineers with an understanding of natural hazards	-	-
Staff with expertise or training in benefit/cost analysis	-	-
Professionals trained in conducting damage assessments	-	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	-	-
Environmental scientist familiar with natural hazards	-	-
Surveyor(s)	-	-
Emergency Manager	-	-
Grant writer(s)	-	-
Resilience Officer	-	-
Other (this could include stormwater engineer, environmental specialist, etc.)	-	-

Fiscal Capability

The table below summarizes financial resources available to the City of Whitehall.

Table 9.40-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	-
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Whitehall.

Table 9.40-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	-	-
Personnel skilled or trained in website development	-	-
Hazard mitigation information available on your website	Yes	Fire information
Social media for hazard mitigation education and outreach	-	-

Outreach Resources	Available? (Yes/No)	Comment:
Citizen boards or commissions that address issues related to hazard mitigation	-	-
Warning systems for hazard events	-	-
Natural disaster/safety programs in place for schools	-	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	-	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Whitehall.

Table 9.40-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.40-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

9.40.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Whitehall.

Table 9.40-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Whitehall (C)	51	66	\$235,185.19	3	0

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Whitehall.

Table 9.40-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	-
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	-
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	-
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also

NFIP Topic	Comments
	triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	-
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	-
NFIP Compliance	
What local department is responsible for floodplain management?	-
Are any certified floodplain managers on staff in your jurisdiction?	-
Do you have access to resources to determine possible future flooding conditions from climate change?	-
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	-
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	-
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	-
What are the barriers to running an effective NFIP program in the community, if any?	-
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	-
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	-
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	-
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	-
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	-
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	-

9.40.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.40-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	-	-	-	-	-	-	-	-	-	-
Multi-Family	-	-	-	-	-	-	-	-	-	-
Other (commercial, mixed-use, etc.)	-	-	-	-	-	-	-	-	-	-
Total Permits Issued	-	-	-	-	-	-	-	-	-	-

Table 9.40-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.40.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Whitehall's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Whitehall has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.40-1. City of Whitehall Hazard Area Extent and Location Map-Flood

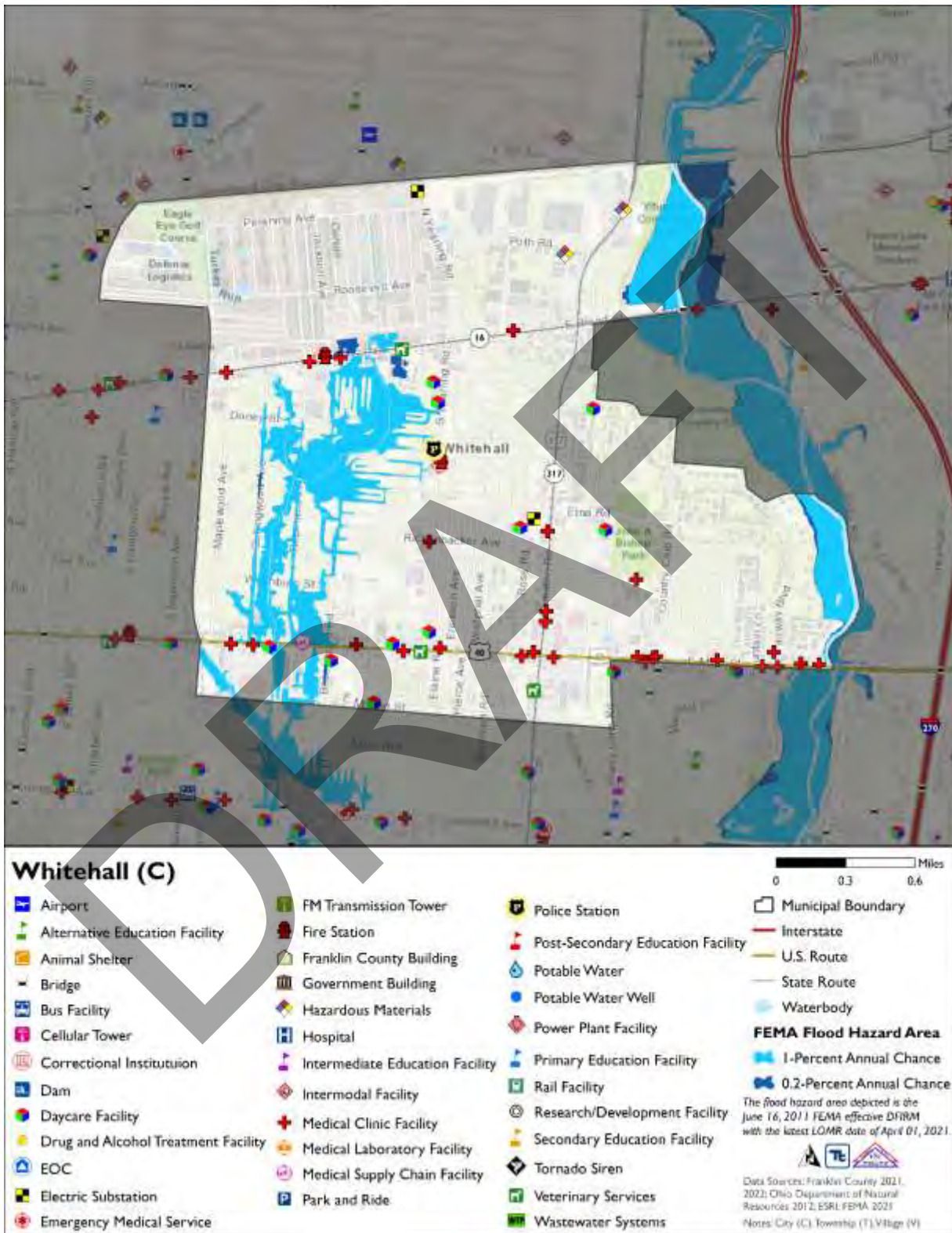


Figure 9.40-2. City of Whitehall Hazard Area Extent and Location Map-Inland Erosion

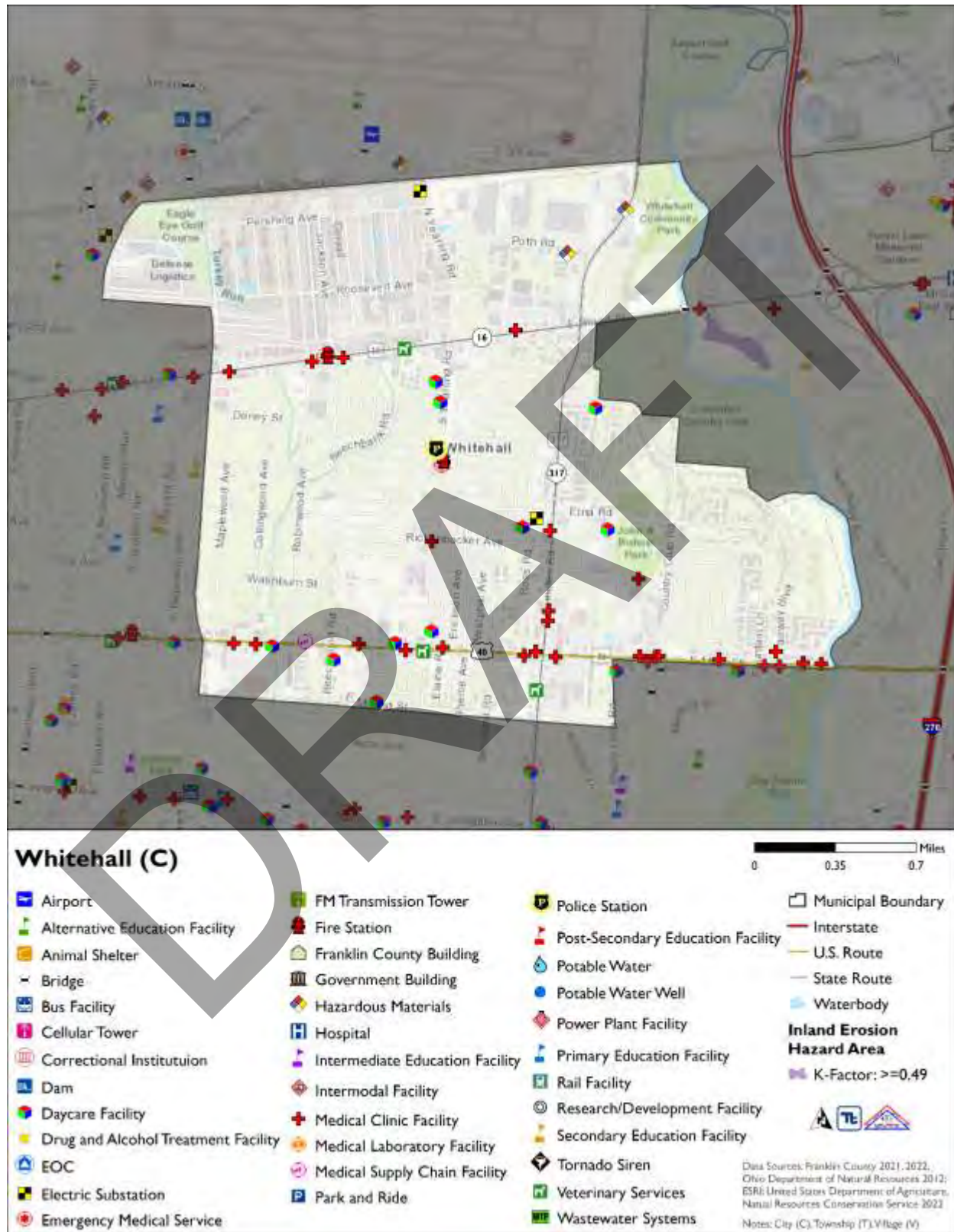
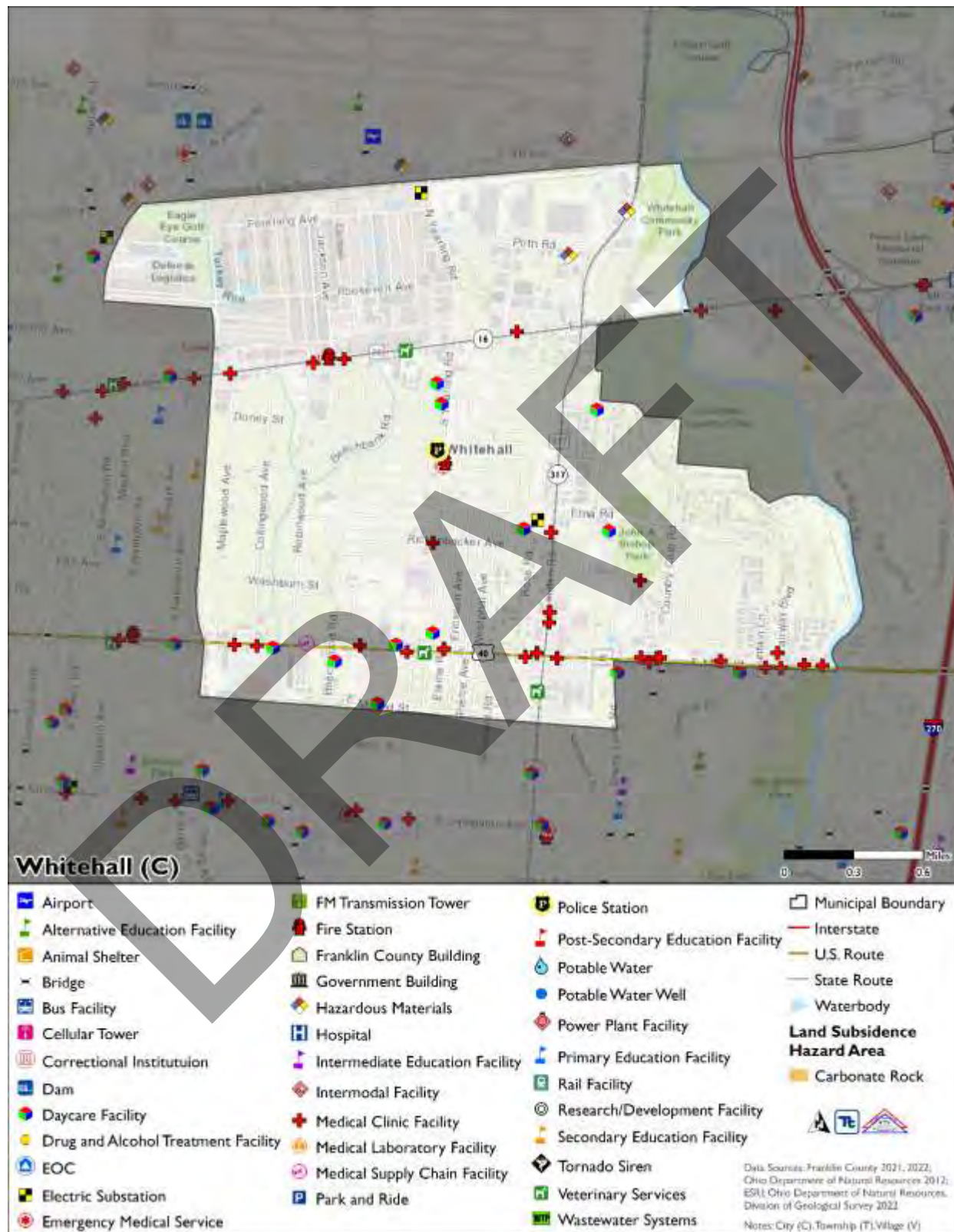


Figure 9.40-3. City of Whitehall Hazard Area Extent and Location Map- Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The City of Whitehall's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Whitehall experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.40-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The City did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The City did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Whitehall.

The City of Whitehall reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.40-14. Hazard Ranking Input

Hazard	Rankings
Dam/Levee	Low
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.40-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Whitehall

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	2
0.2-Percent Annual Chance Flood Event Hazard Area	11	2
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	2	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	55	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Whitehall identified the following vulnerabilities within its community:

- Whitehall City has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - BIOMAT USA, INC.
 - Today's Child Learning Center

9.40.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.40-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Seek funding to evaluate and potentially resolve areas of concern with continuous localized flooding. (1 known property est. at 150,000 / 4 years) *	Mayor's office			-	-
Seek funding and coordinate with Franklin County Emergency Management and Homeland Security on the problem area near Hamilton Road railroad underpass which continuously floods. (120,000 / 1 year)	Mayor's office			-	-
Conduct hazard mitigation activities related to Mason Run and Turkey Run. (500,000 / 2 year)	Mayor's office			-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Whitehall identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Whitehall has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.40-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	-	-	-	-	-	-	-	-	-	-
Disease Outbreak	-	-	-	-	-	-	-	-	-	-
Drought	-	-	-	-	-	-	-	-	-	-
Earthquake	-	-	-	-	-	-	-	-	-	-
Extreme Temp	-	-	-	-	-	-	-	-	-	-
Flood	-	X	-	-	-	-	-	-	X	-
Geologic	-	-	-	-	-	-	-	-	-	-
Invasive Species	-	-	-	-	-	-	-	-	-	-
Severe Summer Weather	-	X	-	-	-	-	-	-	X	-
Severe Winter Weather	-	X	-	-	-	-	-	-	X	-
Tornado	-	-	-	-	-	-	-	-	-	-

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.40-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Whitehall will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.40-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-Whitehall City-001	Repetitive Loss Mitigation	<p>Problem: Whitehall City has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	Existing	Flood, Severe Summer Weather, Severe Winter Weather	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	The Repetitive loss structures will no longer flood as frequently.	>\$100,000 per property	High	SIP	SP
2023-Whitehall City-002	Flood Vulnerability Evaluation	<p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> BIOMAT USA, INC. Today's Child Learning Center 	Existing	Flood	6	Less than 5 Years	NFIP Floodplain Administrator, Property Owners	HMGP, FMA, BRIC, CDBG	Critical facilities will be able to continue to operate and will not flood as often.	TBD after feasibility assessment	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include: <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers Once the most cost-effective option is identified, the City will carry out the option.											

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.40-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-Whitehall City-001	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High
2023-Whitehall City-002	Flood Vulnerability Evaluation	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.41 CITY OF WORTHINGTON

This section presents the jurisdictional annex for the City of Worthington that provides resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Worthington participated in the planning process, an assessment of the City of Worthington's risk and vulnerability, the different capabilities used in the City of Worthington, and an action plan that will be implemented to achieve a more resilient community.

9.41.1 Hazard Mitigation Planning Team

The City of Worthington identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City departments, including Service & Engineering and the Fire Department. The Director of Service & Engineering represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.41-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	John Moorehead, Director of Service & Engineering	Name/Title:	Mark Zambito, Fire Chief
Address:	380 Highland Ave, Worthington, Ohio 43085	Address:	6500 N High Street, Worthington, Ohio 43085
Phone Number:	614-431-2425	Phone Number:	614-885-7640
Email:	John.moorehead@worthington.org	Email:	Mark.zambito@worthington.org
NFIP Floodplain Administrator			
Name/Title:	John Moorehead, Director of Service & Engineering		
Address:	380 Highland Ave, Worthington, Ohio 43085		
Phone Number:	614-431-2425		
Email:	John.moorehead@worthington.org		
Additional Contributors:			
Name/Title:	Don Phillips, Chief Building Inspector, Division of Building Regulation		
Method of Participation:	Provided data on permits and new development		

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Christopher Craig, Assistant Fire Chief		
Method of Participation:	Provided information on issues, solutions, and capabilities		

9.41.2 Municipal Profile

The City of Worthington is in the northern part of Franklin County and is bordered by and Perry Township to the west. Other than that border, the City is completely surrounded by Columbus. The cities of Worthington and Riverlea form an enclave of Columbus.

According to the American Community Survey, the 2021 population for the City of Worthington was 15,047, a 10.84 percent increase from the 2010 Census population of 13,575. Data from the 2021 American Community Survey indicates that 7.5 percent of the population is 5 years of age or younger and 20.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.41.3 Jurisdictional Capability Assessment and Integration

The City of Worthington performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Worthington to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Worthington and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.41-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Part Thirteen-Building Code; Part Fifteen-Fire Prevention Code	Local, State	Chief Building Official
<i>How does this reduce risk?</i> New construction and alterations are designed and built-in accordance with Ohio Building Code.				
Zoning/Land Use Code	Yes	Part Eleven – Planning and Zoning Code	Local	Planning and Building
<i>How does this reduce risk?</i> Local review of development proposals by staff and elected officials considers whether developments are compatible with their surroundings. Development is discouraged within natural areas such as floodplains, floodways, wetlands, and other sensitive areas.				
Subdivision Ordinance	Yes	Part Eleven – Title One – Subdivision Platting Regulations	Local	Planning and Building
<i>How does this reduce risk?</i> The Municipal Planning Commission may request environmental impact studies for the property to be subdivided and may request and receive reports and studies from any agency having jurisdiction over the property, indicating whether any issues relating to or involving hazardous substances or environmental laws exist which may impact or affect the Subdivision.				
Site Plan Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Ordinance	Yes	Worthington Codified Ordinances 923, 927, 1103,	Local	Service and Engineering with Planning and Building
<i>How does this reduce risk?</i> The purpose of this ordinance is to establish minimum stormwater management requirements and controls for major development. Stormwater management measures for major development shall be designed to provide erosion control, groundwater recharge, stormwater runoff quantity control, and stormwater runoff quality treatment.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	No	-	-	-
<i>How does this reduce risk?</i>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	1105.12-Floodplain Land	Local	Service and Engineering
<i>How does this reduce risk?</i> Regulates land uses and construction within floodplain areas, reducing the risk of losses related to flooding.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	Yes	Part Five – Chapter 507 – Civil Disorders	Local	City Manager's Office

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i> Empowers local officials to implement extra measures to protect life and property during a proclaimed state of emergency.				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Article XII, the Village Green	Local	City Manager
<i>How does this reduce risk?</i> This ordinance preserves the heritage and character of the Village Green and limits its use to the enjoyment of the public.				
Planning Documents				
Comprehensive/Master Plan	Yes	Comprehensive Plan Update & Strategic Plan for Worthington	Local	Planning Department
<i>How does this reduce risk?</i> Provides long term planning for the City, including expected areas of future development.				
Capital Improvement Plan	Yes	Comprehensive Capital Improvement Plan	Local	Department Director Team
<i>How does this reduce risk?</i> A Comprehensive Capital Improvement Plan enables Worthington to budget for the systematic replacement of outdated equipment, infrastructure, and facilities. This practice improves the City's readiness for natural hazards.				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Worthington SWMP for MS4 State General Permit	Local	Service & Engineering
<i>How does this reduce risk?</i> Since 2003, the City of Worthington has been continually developing and following a Stormwater Management Plan. The plan uses six minimum control measures mandated by the Environmental Protection Agency to execute the plan. These six measures are: <ul style="list-style-type: none"> • Good housekeeping - Taking measures within City maintenance operations to protect waterways from pollution, erosion, and sedimentation through programs such as leaf collection and street sweeping • Illicit discharge detection and elimination - Making sure that only rain goes down the drain • Post-construction - Making sure structures for controlling run-off and pollution are maintained • Pre-construction - Reviewing site plans on construction projects to make sure the waterways will be protected from sediment, excessive run-off, and other pollution • Public education - Seminars, newsletters and websites explaining stormwater issues • Public involvement - Programs, such as rain garden projects, stream cleanup days and events, that help people get involved in stormwater management 				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Worthington to oversee and track development.

Table 9.41-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Building, Service and Engineering
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	SFHA
Do you have a buildable land inventory? If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	The City of Worthington is a pre-dominantly built out community with limited potential for growth by annexation.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Worthington and their current responsibilities that contribute to hazard mitigation.

Table 9.41-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	Yes	The five-member Board of Zoning Appeals (BZA) hears requests for variance from the City's Planning and Zoning Code as well as certain requests for variance from the City's Building Code. The BZA serves as a quasi-judicial body and appeals from the BZA are taken to the Franklin County Court of Common Pleas.
Planning Department	Yes	<p>The responsibilities of the Planning Division are carried out by the Planning Coordinator, who acts as the City's staff contact and support person for the following boards:</p> <ul style="list-style-type: none"> Architectural Review Board Board of Zoning Appeals Municipal Planning Commission <p>The Municipal Planning Commission (MPC) performs a variety of functions related to planning and zoning activities in the City. The MPC hears applications for conditional use permits; makes recommendations to the City Council on rezoning, subdivision, and development plan requests; recommends Master Plan updates and amendments to the zoning map and ordinances; and performs interpretations of the City's Planning and Zoning Code</p>
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Green Team works to increase sustainability practices in the City.

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		The Parks and Recreation Commission is made up of seven resident volunteers who are appointed by City Council. The purpose of the commission is to give input, guidance, and recommendations to the Parks and Recreation Staff concerning topics that affect the residents of the City.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Department of Service and Engineering is responsible for providing efficient and high-quality maintenance services to the residents of Worthington, as well as the installation, maintenance and repair of City-owned utilities and infrastructure.</p> <p>The Department consists of 2 divisions, Public Service and Engineering.</p> <p>A crew of 12 full time staff are available for 24/7 emergency call out to clear snow and ice, assist in flood mitigation, and storm damage clearing and clean up.</p>
Construction/Building/Code Enforcement Department	Yes	One Chief Building Official and one building inspector. Both provide support to conducting damage assessments.
Emergency Management/Public Safety Department	Yes	Selected staff serve as an emergency operations command team.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Franklin County ALERT emergency notification system
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Annual storm and sanitary sewer maintenance programs, annual bridge inspections. Public trees are routinely inspected, trimmed, and removed when needed.
Mutual aid agreements	Yes	Automatic aid – Columbus, Franklin co/del co.
Human Resources Manual	Yes	Anything pertaining to Hazard Mitigation would be included in a job title or job description.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Staff in the Planning and Building / Service and Engineering department fill this role.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Two professional Engineers (Chief Building Official and City Engineer)
Planners or engineers with an understanding of natural hazards	Yes	The City Engineer serves as the Flood Damage Prevention Administrator.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Two full time GIS professionals
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	City Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Worthington.

Table 9.41-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Worthington.

Table 9.41-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	The public information and communications office manages community relations and public information functions for the City of Worthington and oversees communications with citizens, businesses, visitors, community partners and the media through the City website, social media, publications, and other communication methods.
Personnel skilled or trained in website development	Yes	Public information and communications office
Hazard mitigation information available on your website	Yes	Information on covid-19, stormwater
Social media for hazard mitigation education and outreach	Yes	Facebook, Twitter, YouTube, Instagram, LinkedIn
Citizen boards or commissions that address issues related to hazard mitigation	Yes	The Green Team
Warning systems for hazard events	Yes	Franklin County ALERT emergency notification system, Notify Me, and social media
Natural disaster/safety programs in place for schools	Yes	<p>The Ohio Fire Code has requirements for a fire safety and evacuation plan that are enabled in Ohio Building Code Chapter 10, and plans were required for the 3 middle schools recently added to, the detached building for Evening St., and will be required for the high school. The Ohio Department of Education also has requirements for plans being in place.</p> <p>In relation to the schools offering natural disaster/safety programs for the students themselves, there are no programs currently available.</p>
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Worthington.

Table 9.41-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Residential – Class 9 Commercial – Class 3	September 28, 2010*
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 3	March 1, 2020
StormReady Certification	No	(Franklin County is StormReady)	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.41-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee	Moderate
Disease Outbreak	Strong
Drought	Moderate
Earthquake	Moderate
Extreme Temp	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornado	Moderate

- The City has noted that long-term response capabilities are weak overall. After 48-hours, the City acknowledges they would rely on outside resources for the drought, extreme temperature, flood, and severe weather, severe winter weather, and tornado hazards.
- The City’s response to the COVID-19 pandemic was strong. The City has a multitude of resources, including being involved in the Department of Homeland Security’s BioWatch Program, having access to reports and guidelines from Columbus Public Health, and employing individuals with an

understanding of communicable diseases. For these reasons, the City increased its adaptive capacity from 'Moderate' to 'Strong' for the disease outbreak hazard.

9.41.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Worthington.

Table 9.41-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
Worthington (C)	24	55	\$271,451.85	5	1

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Worthington.

Table 9.41-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Yes
<ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	None have been declared for recent flood events SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI

NFIP Topic	Comments
	inspections can be requested through the county emergency management agency director.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Service and Engineering
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, engineering support, education/outreach, inspections, GIS mapping, FEMA and ODNR coordination.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Through a review of the appraised value of structures on the property and reported value of proposed improvements.
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
• What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended?	1105.12, this code was last updated on 4-12-1999.
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Yes
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Unknown
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Unknown

9.41.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.41-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	13	0	6	0	3	0	1	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	2	0	0	0	6	0	1	0	3	0
Total Permits Issued	15	0	6	0	9	0	2	0	5	0

Table 9.41-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
Worthington Gateway	Commercial	6 structures	100-006792, 100-006791, 100-006793	None	Mixed use redevelopment / Under Construction
Tilton's Automotive	Commercial	1 structure	100-002184	None	Automotive repair center / Under Construction
Worthingway Middle School	Commercial	1 structure	100-003968	None	Renovation and expansion of an existing middle school / Complete
Known or Anticipated Major Development in the Next Five (5) Years					
High North	Commercial	Pending	100-006788	None	Mixed use redevelopment / Planning Stage
Thomas Worthington High School	Commercial	Pending	100-006617	Floodplain	Renovation and expansion of an existing High school / Planning Stage

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.41.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Worthington's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Worthington has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.41-1. City of Worthington Hazard Area Extent and Location Map - Flood

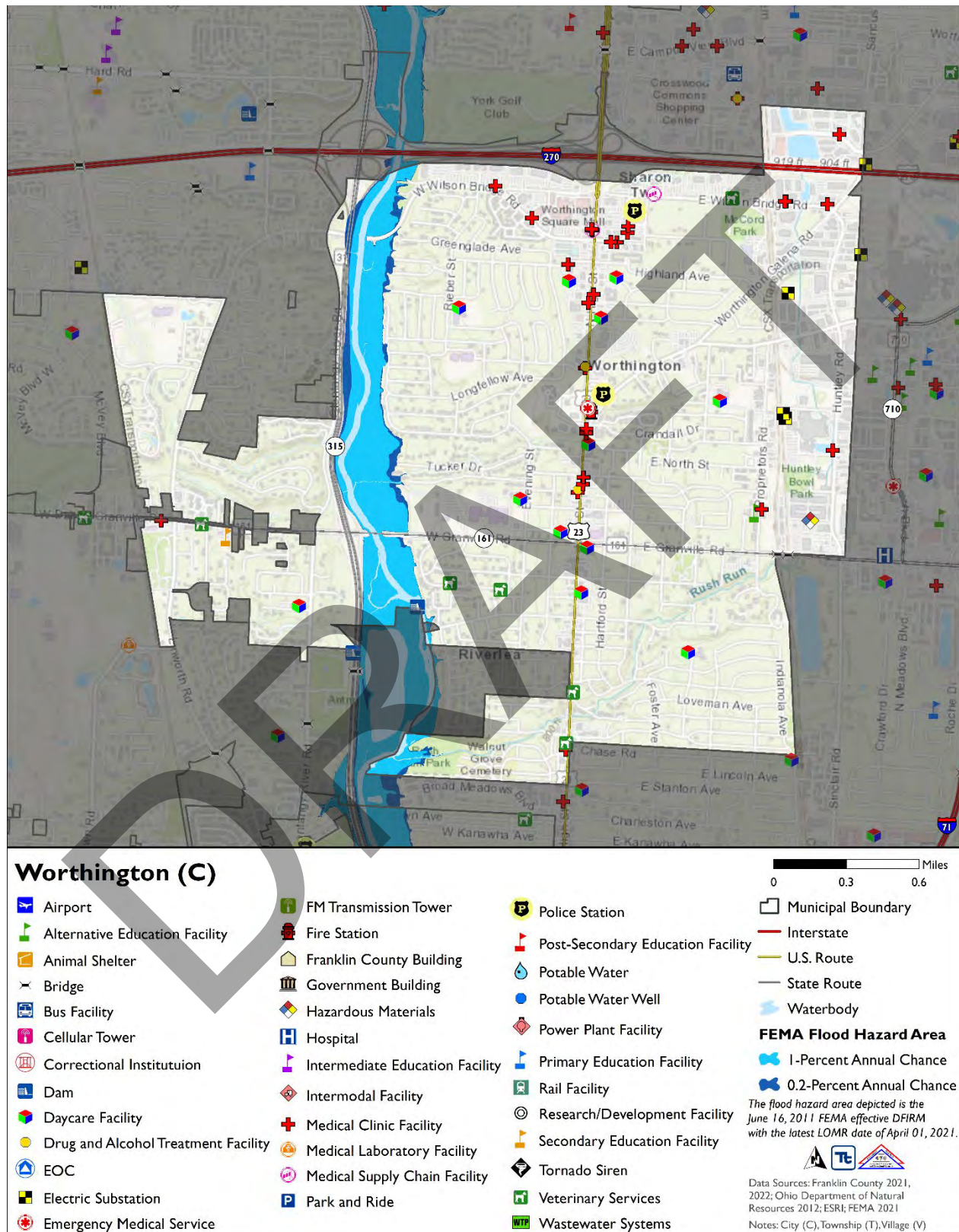


Figure 9.41-2. City of Worthington Hazard Area Extent and Location Map – Land Subsidence

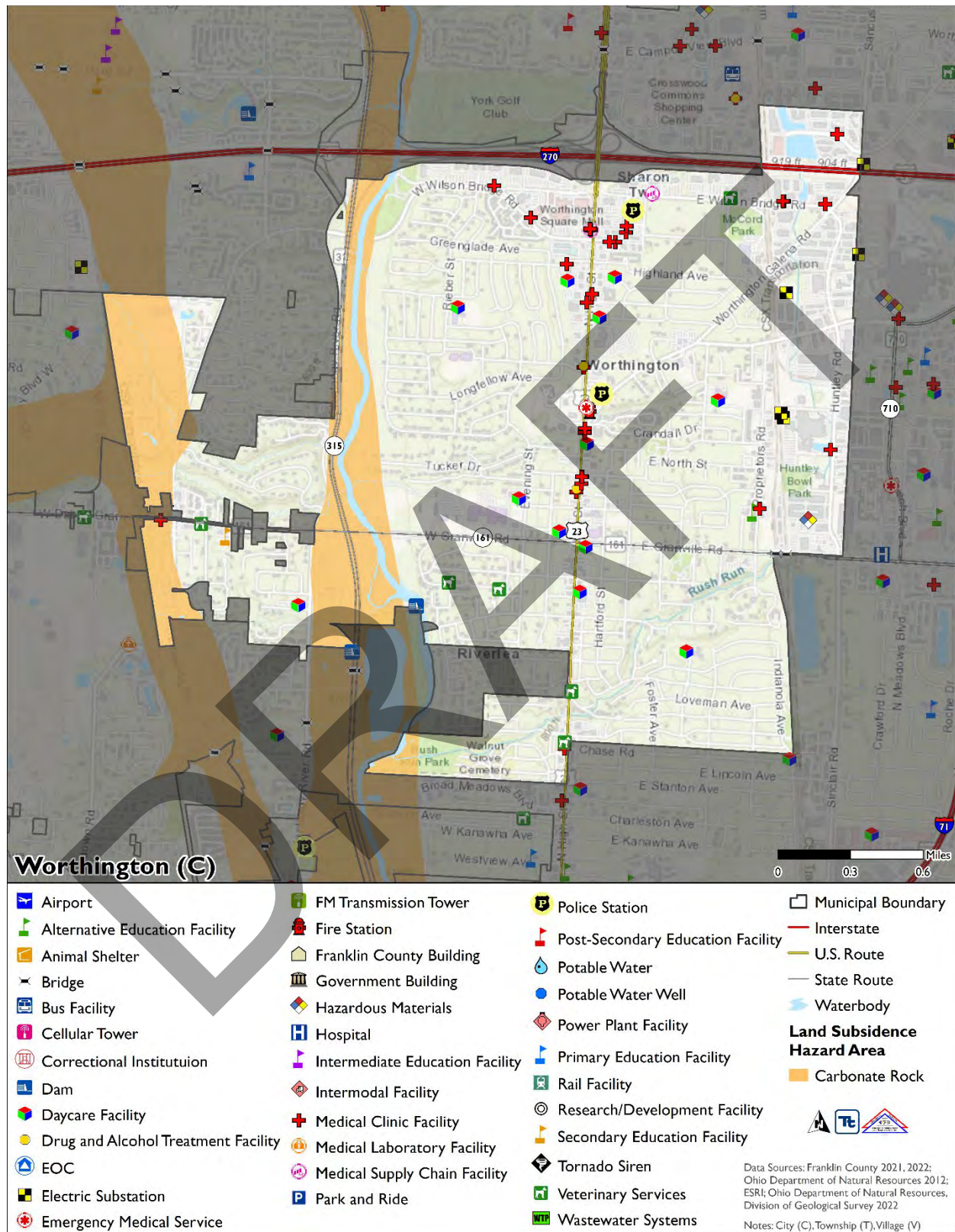
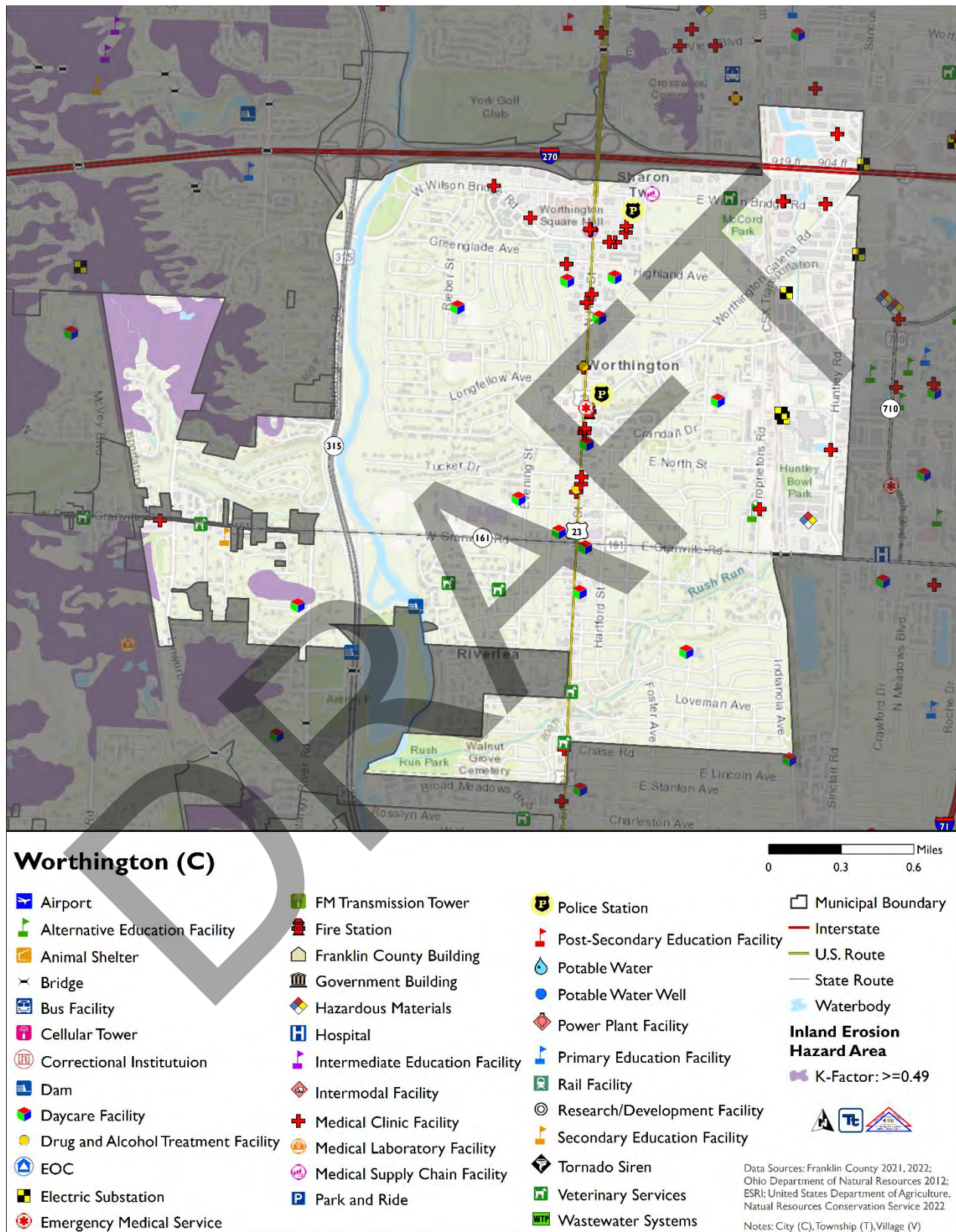


Figure 9.41-3. City of Worthington Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Worthington's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Worthington experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.41-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 3-4, 2018	EF-1 Tornado	N/A	Severe thunderstorms and tornadoes developed in the area. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage.	Although the County was impacted, the City did no report major damages.
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	Although the County was impacted, the City did no report major damages.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	Although the County was impacted, the City did no report major damages.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The City was subject to closures and social distancing/masking requirements.
May 18-19, 2020	Thunderstorms	No	Heavy rains in Worthington caused Water In Basement Flooding events in areas close to the Olentangy parklands. 51 households experienced some level of water damage in their basements. Rainfall intrusion to sanitary sewers contributed to sewer backups in the affected households.	City staff closed roads on Tucker Drive and Whitney Avenue due to rising floodwaters. Service employees worked overtime responded to downed trees, floodwater, and sewage backups.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each

hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Worthington. The City of Worthington reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Worthington indicated the following:

- The City is approximately 20 miles downstream from the Delaware Dam, a high hazard dam located in Delaware County on the Olentangy River. The City requested the 'Low' ranking for Dam/Levee be increased to 'Medium'.

Table 9.41-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temp	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornado	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.41-15. Number of Critical Facilities and Community Lifelines in Hazard Areas

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	3	1
0.2-Percent Annual Chance Flood Event Hazard Area	3	1
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	3
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	2

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Worthington identified the following vulnerabilities within its community:

- Some roadways need to be closed due to flood waters.
- Residents have experienced basement flooding in areas close to the Olentangy parklands.
- Residents have experienced sewage back-ups due to rainfall intrusion to sanitary sewers.
- The City is approximately 20 miles downstream from the Delaware Dam, a high hazard dam located in Delaware County on the Olentangy River.
- The Griswold Senior Center and the City Hall, both critical facilities, do not have emergency back-up power.
- The City acknowledged familiarity with the identified hazards is fairly limited.
- The emergency operations plan for the City is outdated.
- The Olentangy River has issues with erosion.
- The City is not aware of the complete inventory Franklin County has available for emergency responses.
- Areas of the City are susceptible to pooling waters.
- The City relies on the City of Columbus for its water supply.
- Many critical facilities and community lifelines do not have Continuity of Operations Plans.
- The City has the resources for short-term emergency responses but relies on outside resources for most events which surpass 48-hours.
- Public outreach about each hazard is limited and should be increased.

9.41.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.41-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Retrofit public buildings and critical facilities with generator service	Public Safety	Complete	No	-	-
Retrofit structures in the Haymore Avenue Area. (1,500,000 / 1 year	Mayor's office	No Progress	No	-	-
Seek funding for repetitive loss structures within the jurisdiction to permanently reduce damages to these structures*(4 known properties est. at 900,000 /4 years)	Mayor's office	No Progress	No	-	-

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Worthington identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the City of Worthington has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Worthington participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.41-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee	X	X	-	X	-	X	X	-	-	X
Disease Outbreak	-	-	-	X	-	-	X	-	-	X
Drought	X	X	-	X	-	X	X	-	-	X
Earthquake	-	-	-	X	-	-	X	-	-	X
Extreme Temp	-	X	-	X	-	X	X	-	-	X
Flood	-	X	X	X	-	X	X	X	-	X
Geologic	-	-	X	X	-	-	X	X	-	X
Invasive Species	-	-	X	X	-	-	X	X	-	X
Severe Summer Weather	-	X	-	X	-	X	X	X	-	X
Severe Winter Weather	-	X	-	X	-	X	X	-	-	X
Tornado	-	X	-	X	-	X	X	X	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.42-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Worthington will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.41-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goal(s) Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Worthington-001	Resource Coordination	<p>Problem: The City has the resources for short-term emergency responses but relies on outside resources for most events which surpass 48-hours. The City also has limited resources for preparedness activities.</p> <p>Solution: Coordinate with Franklin County to understand the resources available for emergency response and preparedness activities.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	4	<1 year	Worthington OEM, Franklin County EM&HS	Staff Time	High	Low	High	-	ES
2023-City of Worthington-002	Dam Response Plan	<p>Problem: The City is approximately 20 miles downstream from the Delaware Dam, a high hazard dam, located in Delaware County on the Olentangy River; the City also has the State Route 161 Dam located within its jurisdiction.</p> <p>Solution: Discuss with both Franklin and Delaware County the possible inundation impacts</p>	Dam/Levee	4	3 to 4 years	Worthington OEM, Franklin County EM&HS, Delaware County OEM	BRIC, NDSP, EMPG	Medium	Medium	Medium	LPR	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goal(s) Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		and formulate a Dam Response Plan.										
2023-City of Worthington-003	Emergency Generators at Critical Facilities*	<p>Problem: The Griswold Senior Center and the City Hall, both critical facilities, do not have emergency back-up power.</p> <p>Solution: Work with an engineer to determine the appropriately sized generator for each facility and install the generators.</p>	Dam/Levee, Drought, Extreme Temperatures, Flood, Severe Summer Weather, Severe Winter Weather, Tornado	6	2 to 3 years	Department of Service & Engineering, Griswold Senior Center, City Administrator	BRIC, HMGP, Capital Funds	High	Medium	Medium	SIP	PP
2023-City of Worthington-004	Update of the Emergency Operations Plan	<p>Problem: The City's Emergency Operations Plan is outdated.</p> <p>Solution: Update the City's Emergency Operations Plan.</p>	Dam/Levee, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornado	1	1 to 2 years	Worthington OEM	EMPG	High	Low	High	-	ES
2023-City of Worthington-005	Hazard Mitigation Consultant	<p>Problem: The City is unfamiliar with all the risks associated with potential hazards and how to mitigate the hazards.</p> <p>Solution: Hire a consultant to educate City officials and assist in the identification of</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic	1, 4, 5	2 to 3 years	Worthington OEM, City Administrator	BRIC, HMGP	High	High	Medium	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goal(s) Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		additional actions to mitigate impacts from hazards.	Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado									
2023-City of Worthington-006	Continuity of Operations Plans	<p>Problem: Critical facilities and community lifelines within the City do not have Continuity of Operations Plans.</p> <p>Solution: Assist in the development of Continuity of Operations Plans for critical facilities and community lifelines within the City.</p>	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornado	4	3 to 4 years	Worthington OEM, Various City Departments	BRIC, EMPG	High	Medium	High	-	ES
2023-City of Worthington-007	Water Supply Reduction Point	<p>Problem: The City's water supply is sourced from the City of Columbus. In the event of a drought, there is no known marker for when the water supply would be reduced.</p> <p>Solution: In partnership with the City of Columbus, identify at which point would the City of Worthington's water supply be impacted during a drought.</p>	Drought	1, 4	1 to 2 years	Worthington OEM, Worthington Department of Service & Engineering, City of Columbus Division of Water	N/A	High	Low	Medium	LPR	-

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goal(s) Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Worthington-008	Standing Water Maintenance*	Problem: Areas of the City are susceptible to standing and pooling waters. Solution: Implement a maintenance program to reduce the amount of standing or pooling water by grading soil and/or addressing potholes.	Disease Outbreak, Invasive Species	1	2 to 3 years	Worthington Department of Service & Engineering	Capital Funds	High	Low	Low	-	-
2023-City of Worthington-009	Hazard Education Campaign	Problem: Public outreach regarding preparedness, prevention, and mitigation for hazards is limited and should be increased. Solution: Partner with State, County, and Local public health and safety departments to create guidance and educational pamphlets on how to prepare for, prevent, and mitigate the hazards in the City of Worthington.	Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado	4, 5	1 to 2 years	Worthington OEM, Franklin County EM&HS, OEMA	BRIC, HMGP, Capital Funds	High	Low	High	EAP	PI
2023-City of Worthington-010	Olentangy Erosion Study	Problem: The Olentangy River has been experiencing increased amounts of erosion. Solution: Conduct a study on the impacts of erosion to the Olentangy River and its floodplain.	Flood, Geologic Hazards	2, 3	3 to 4 years	Worthington Department of Service & Engineering	BRIC, HMGP	Medium	Medium	Low	NSP	NR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goal(s) Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Worthington-011	Olentangy Parklands Culvert Study*	Problem: Residents in the Olentangy parklands have experienced flooded basements and sewage back-ups due to rainfall intrusion to sanitary sewers. Solution: Conduct a study to identify the correct sizing of culverts in the Olentangy parklands.	Flood, Severe Summer Weather	2, 3, 6	1 to 2 years	Worthington Department of Service & Engineering	BRIC, HMGP, Capital Funds	Medium	Medium	Low	SIP	NR
2023-City of Worthington-012	Tree Maintenance and Inspection	Problem: The City of Worthington conducts tree maintenance and inspections to assess impacts from invasive species and remove affected trees. Solution: Update the tree maintenance and inspection program to include preventative methods such as insecticides.	Invasive Species	1	1 to 2 years	Worthington Department of Service & Engineering	Capital Funds	High	Low	Low	NSP	NR

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.41-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Worthington-001	Resource Coordination	1	1	1	1	1	1	1	1	0	1	1	1	1	0	12	High
2023-City of Worthington-002	Dam Response Plan	1	1	1	1	1	1	-1	1	0	0	-1	0	1	0	6	Medium
2023-City of Worthington-003	Emergency Generators at Critical Facilities	1	1	1	1	1	0	0	-1	0	0	1	0	1	0	6	Medium
2023-City of Worthington-004	Update of the Emergency Operations Plan	1	0	1	1	1	1	1	1	0	1	1	0	1	0	10	High
2023-City of Worthington-005	Hazard Mitigation Consultant	1	1	1	1	1	1	-1	1	0	-1	1	0	1	0	7	Medium
2023-City of Worthington-006	Continuity of Operations Plans	0	1	1	1	1	1	1	1	0	1	1	0	1	0	10	High

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Worthington-007	Water Supply Reduction Point	1	0	1	1	1	1	1	1	0	0	-1	1	1	0	8	Medium
2023-City of Worthington-008	Standing Water Maintenance	0	-1	1	1	0	1	1	0	0	1	0	0	0	0	4	Low
2023-City of Worthington-009	Hazard Education Campaign	1	1	1	1	1	1	1	1	0	1	1	1	1	0	12	High
2023-City of Worthington-010	Olentangy Erosion Study	0	1	1	1	0	1	0	1	0	-1	0	0	0	0	4	Low
2023-City of Worthington-011	Olentangy Parklands Culvert Study	0	1	1	1	0	1	0	1	0	-1	0	0	0	0	4	Low
2023-City of Worthington-012	Tree Maintenance and Inspection	0	0	1	1	0	1	1	1	0	0	-1	0	0	0	4	Low

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.42 THE OHIO STATE UNIVERSITY

This section presents the jurisdictional annex for the Ohio State University that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Ohio State University participated in the planning process, an assessment of the Ohio State University's risk and vulnerability, the different capabilities used in the Ohio State University, and an action plan that will be implemented to achieve a more resilient community.

9.42.1 Hazard Mitigation Planning Team

The Ohio State University identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Ohio State University departments, including Department of Emergency Management and Fire Prevention and the Byrd Polar and Climate Research Center. The Director of Emergency Management and the Education and Outreach Coordinator for the Byrd Polar and Climate Research Center represented the University on the Franklin County Hazard Mitigation Plan Core Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.42-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Bob Armstrong, Director of Emergency Management	Name/Title:	Karina Peggau, Education & Outreach Program Coordinator - Byrd Polar and Climate Research Center
Address:	Michael Blankenship Hall, 901 Woody Hayes Dr., Columbus, OH 43210	Address:	Scoot Hall, 1090 Carmack Rd Columbus, OH 43210
Phone Number:	(614) 247-4276	Phone Number:	(614) 688-8279
Email:	armstrong.349@osu.edu	Email:	peggau.1@osu.edu

9.42.2 Municipal Profile

The Ohio State University, a public land-grant research university, is located in Columbus, east from Clinton Township and is commonly called Ohio State or OSU. The University was founded in 1870 as the state's land grant university. The University is located beside the Olentangy River which separates the University from Clinton Township. There was a total of 67,772 people enrolled at The Ohio State University in Autumn 2021.

9.42.3 Jurisdictional Capability Assessment and Integration

The Ohio State University performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of University capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Ohio State University to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Ohio State University and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.42-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Municipal capabilities like code and zoning enforcement and NFIP participation are not applicable at a university level.				
Planning Documents				
Comprehensive/Master Plan	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i> N/A				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Climate Action/ Resiliency/Sustainability Plan	Yes	Climate Action Plan (April 2020)	The Ohio State University	The Ohio State University
<i>How does this reduce risk?</i> The Ohio State University today released a plan to cut its carbon emissions in half within this decade. This accelerates the university's ability to achieve full carbon neutrality by 2050.				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i> N/A				
Other	Yes	The Ohio State University Framework Plan (August 2010)	The Ohio State University	Administration and Planning

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p><i>How does this reduce risk?</i></p> <p>The Framework is a structure for guiding change over time, connecting ideas and information to implementation. It touches the full spectrum of university activity: academics and research, residential life, the medical center, arts and culture, athletics and recreation, the river and open space, transportation and parking, energy, infrastructure, and sustainability. Stakeholders representing these topics collaborated extensively in the planning process; numerous university and community constituents contributed to ensure a rich context informed the Framework.</p>				
Other	Yes	Sustainable Design and Construction Policy (February 2021)	The Ohio State University	Facilities Operations and Development
<p><i>How does this reduce risk?</i></p> <p>The university has set ambitious sustainability goals to develop and demonstrate durable solutions to complex and pervasive environmental challenges. These goals include achieving carbon neutrality, reducing building energy use, conserving water, improving ecosystems services, and diverting landfill waste. To align the university's physical environment with these goals, this policy incorporates sustainability requirements into all qualifying university projects.</p>				
Other	Yes	Building Emergency Action Plan(s) Template (Update and Revision) (October 2020)	The Ohio State University	Environmental Health and Safety, Public Safety
<p><i>How does this reduce risk?</i></p> <p>The BEAP correlates with the larger Ohio State University Comprehensive Emergency Management Plan (CEMP) for campus operations during large scale or campus-wide emergencies and departmental specific business continuity plans for departmental operations during departmental or campus emergencies. The evacuation of university facilities presents unique situations and challenges. Some facilities may house only one department or college office whereas other facilities may contain business space for numerous departments. Additionally, the space occupied in university facilities may contain a wide range of uses including administrative office space, classroom space, lecture halls, conference rooms, laboratories, academic office space, etc. A major challenge for the successful evacuation of university facilities is the population of the facility changes every hour. It is difficult to know at any given time the exact number of occupants in any university facility. Timely and responsible evacuation often becomes the responsibility of a few key individuals. This plan is designed to address these concerns and as a resource to provide important information and assist in the safe evacuation of campus facilities.</p>				
Other	Yes	Framework 3.0 (Update and Revision) (2023)	The Ohio State University	Planning, Architecture and Real Estate
<p><i>How does this reduce risk?</i></p> <p>The Ohio State University is embarking on a study to update the campus master plan, Framework 2.0. The next iteration of the university's long-term vision for its physical environment, Framework 3.0, will begin with a refresh of baseline facility data and take into consideration, academic and research excellence and facilities strategies, student housing, dining and recreation, campus landscapes and streetscapes, connectivity and mobility, post-pandemic space needs, academic core backfill opportunities, as well as facility condition, deferred maintenance planning and energy targets. The study is expected to be completed by late 2023.</p>				
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Comprehensive Emergency Management Plan (Update and Revision) (October 2017)	The Ohio State University	Public Safety, Emergency Management
<p><i>How does this reduce risk?</i></p> <p>The Comprehensive Emergency Management Plan (CEMP) addresses The Ohio State Universities planned response to emergencies associated with natural, technological, and man-made incidents/disasters. This document is the underlying framework for protection of health, safety, and property of students, staff, faculty, and visitors during incidents/disasters at The Ohio State University. It is intended to facilitate multiple agency/jurisdiction coordination; specifically, between the University and Local, State, and Federal governments operating under a national incident management framework.</p>				
Continuity of Operations Plan	No	-	-	-
<p><i>How does this reduce risk?</i></p> <p>N/A</p>				
Strategic Recovery Planning Report	No	-	-	-
<p><i>How does this reduce risk?</i></p> <p>N/A</p>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
How does this reduce risk? N/A				
Post-Disaster Recovery Plan	No	-	-	-
How does this reduce risk? N/A				
Public Health Plan	No	-	-	-
How does this reduce risk? N/A				
Other	No	-	-	-
How does this reduce risk?				

Development and Permitting Capability

The table below summarizes the capabilities of the Ohio State University to oversee and track development.

Table 9.42-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	The Ohio State University is not structured along the lines of a political jurisdiction. Municipal capabilities like code and zoning enforcement and NFIP participation are not applicable at a university level.
If you do not issue development permits, what is your process for tracking new development?	N/A	Coordination with the City of Columbus and the University Impact District Review Board.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Ohio State University and their current responsibilities that contribute to hazard mitigation.

Table 9.42-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Public Works/Highway Department	Yes	Facilities and Operations Development (FOD) Operations team performs building and roadway maintenance, snow removal, and landscaping services for the university and the Wexner Medical Center. The FOD is also responsible for campus custodial, sustainability and energy services, offering an integrated service model that provides customers with a single point of contact and around-the-clock service.
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	Ohio State's Emergency Management provides preparedness planning, training and exercises, incident management and coordination, emergency warnings and public information, policy formulation, and resource allocation and prioritization before, during, and after disasters and incidents on our campuses.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	In the event of severe weather, Ohio State's Department of Public Safety actively monitors and shares significant updates with the university community. If a tornado warning is identified for the Columbus campus, the Buckeye Alert System automatically sends severe weather alerts to students, faculty, and staff. This system can be used for any mass notification needs.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Facilities and Operations Development (FOD) Operations team performs building and roadway maintenance, snow removal, and landscaping services for the university and the Wexner Medical Center. The FOD is also responsible for campus custodial, sustainability and energy services, offering an integrated service model that provides customers with a single point of contact and around-the-clock service.
Mutual aid agreements	Yes	The Ohio State University has mutual aid agreements in place with the City of Columbus for various needs.
Human Resources Manual	Yes	Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	-
Planners or engineers with an understanding of natural hazards	Yes	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	-
Environmental scientist familiar with natural hazards	Yes	-
Surveyor(s)	No	-
Emergency Manager	Yes	-
Grant writer(s)	Yes	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
How do your administrative/technical capabilities contribute to risk reduction in your community?		
The combined efforts and knowledge of administrative and technical personnel, groups, and committees make it possible to identify and implement policies, plans, and actions to assist in the reduction of risk across the Ohio State University's campuses.		

Fiscal Capability

The table below summarizes financial resources available to the Ohio State University.

Table 9.42-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	-
Capital improvements project funding	-
Authority to levy taxes for specific purposes	-
User fees for water, sewer, gas, or electric service	-
Impact fees for homebuyers or developers of new development/homes	-
Stormwater utility fee	-
Incur debt through general obligation bonds	-
Incur debt through special tax bonds	-
Incur debt through private activity bonds	-
Withhold public expenditures in hazard-prone areas	-
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	-
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Operational Funds

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Ohio State University.

Table 9.42-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Office of Marketing and Communications
Personnel skilled or trained in website development	Yes	The Ohio State University has employees who manage and update the University's website.
Hazard mitigation information available on your website	Yes	The Emergency Management and Fire Prevention webpage.
Social media for hazard mitigation education and outreach	Yes	The Ohio State University has accounts on Twitter, Instagram, Facebook, and TikTok
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	In the event of severe weather, Ohio State's Department of Public Safety actively monitors and shares significant updates with the university community. If a tornado warning is identified for the Columbus campus, the Buckeye Alert System automatically sends severe weather alerts to students, faculty, and staff. This system can be used for any mass notification needs.
Natural disaster/safety programs in place for schools	No	Other than those within the educational tracts, there are no natural disaster/safety programs at the University.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens	Yes	The Ohio State University will utilize its social media platforms and Buckeye Alert System during an active event to inform students, faculty, and staff how to stay safe during the event.

Outreach Resources	Available? (Yes/No)	Comment:
on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.		

Community Classifications

The table below summarizes classifications for community programs available to the Ohio State University.

Table 9.42-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	Yes	-	2015
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.42-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Geologic	Moderate
Invasive Species	Moderate
Severe Summer Weather	Strong
Severe Winter Weather	Moderate
Tornadoes	Moderate

9.42.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes the NFIP statistics for the Ohio State University.

Table 9.42-9. NFIP Summary

Municipality	Policies in Force ^a	Number of Paid Claims ^a	Amount of Paid Claims ^a	Number of NFIP RL Properties ^b	Number of NFIP SRL Properties ^b
The University does not participate in the NFIP					

NFIP Summary

The following table provides a summary of NFIP information for the Ohio State University.

Table 9.42-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Municipal capabilities like code and zoning enforcement and NFIP participation are not applicable at a university level.	
NFIP Compliance	
Municipal capabilities like code and zoning enforcement and NFIP participation are not applicable at a university level.	

9.42.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.42-11. Number of Building Permits for New Construction Since the Previous HMP

Type of Development	2018		2019		2020		2021		2022	
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	The University does not issue building permits.									
Multi-Family										
Other (commercial, mixed-use, etc.)										
Total Permits Issued										

Table 9.42-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

9.42.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Ohio State University's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Ohio State University has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.42-1. Ohio State University Hazard Area Extent and Location Map - Flood

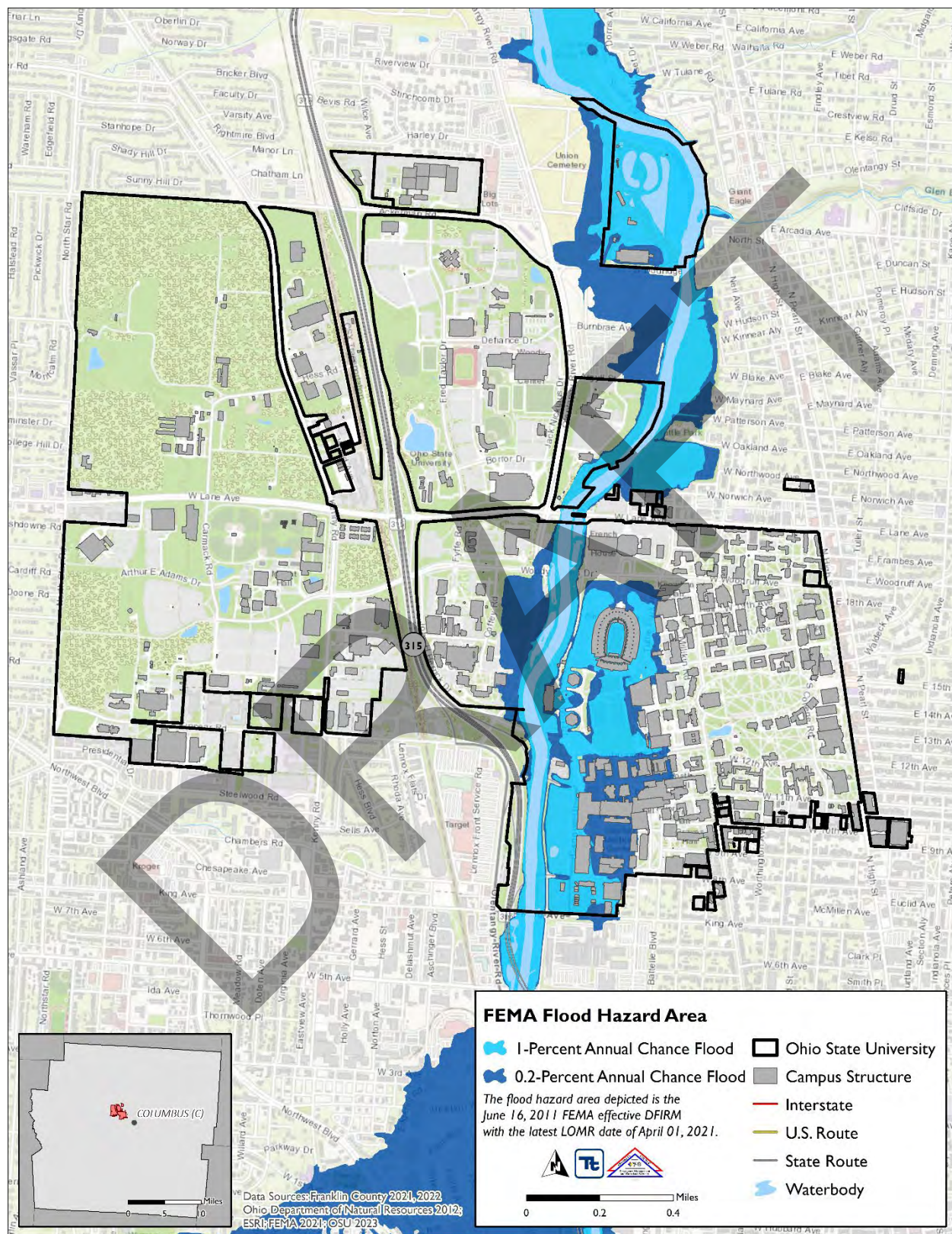


Figure 9.42-2. Ohio State University Hazard Area Extent and Location Map – Erosion

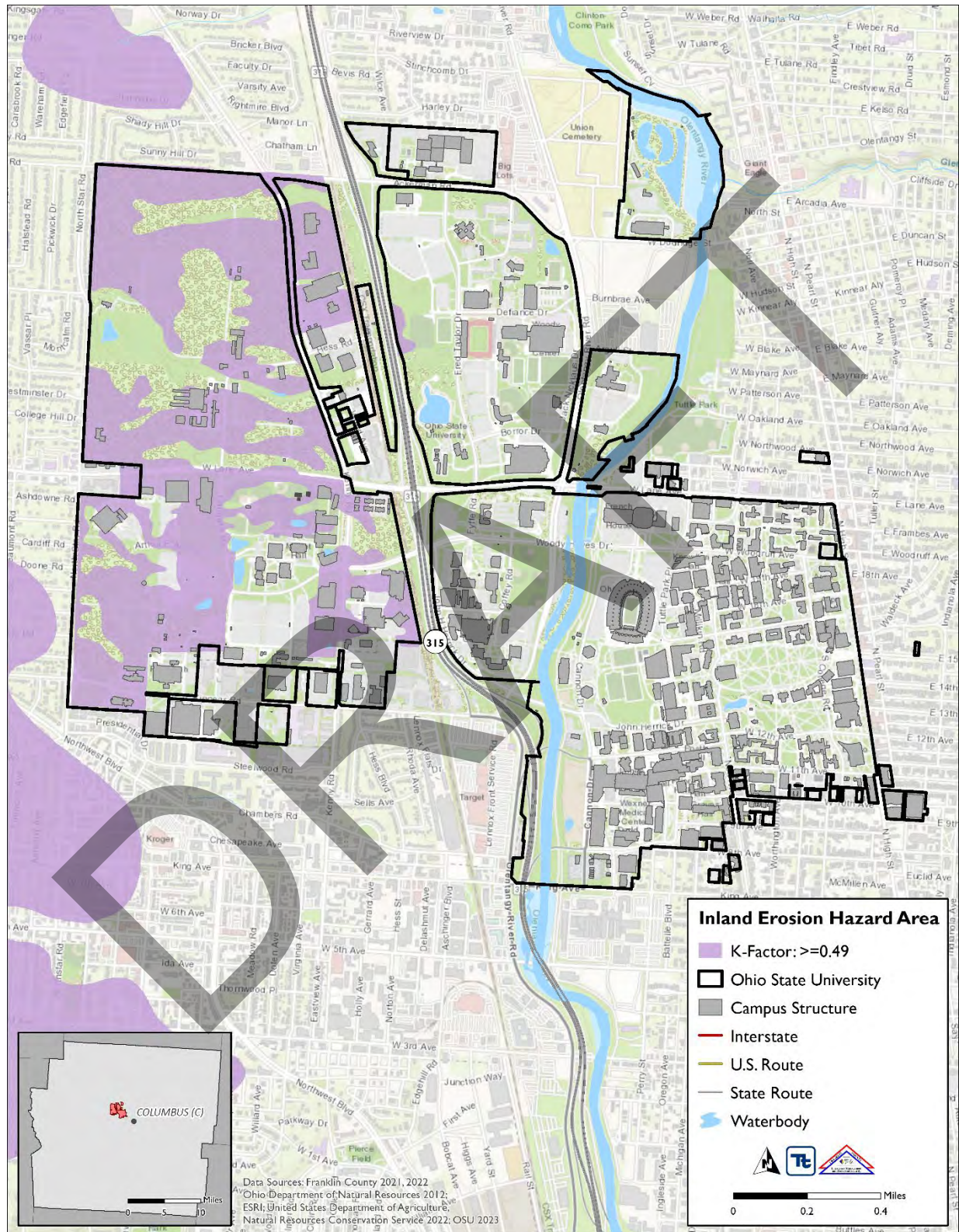
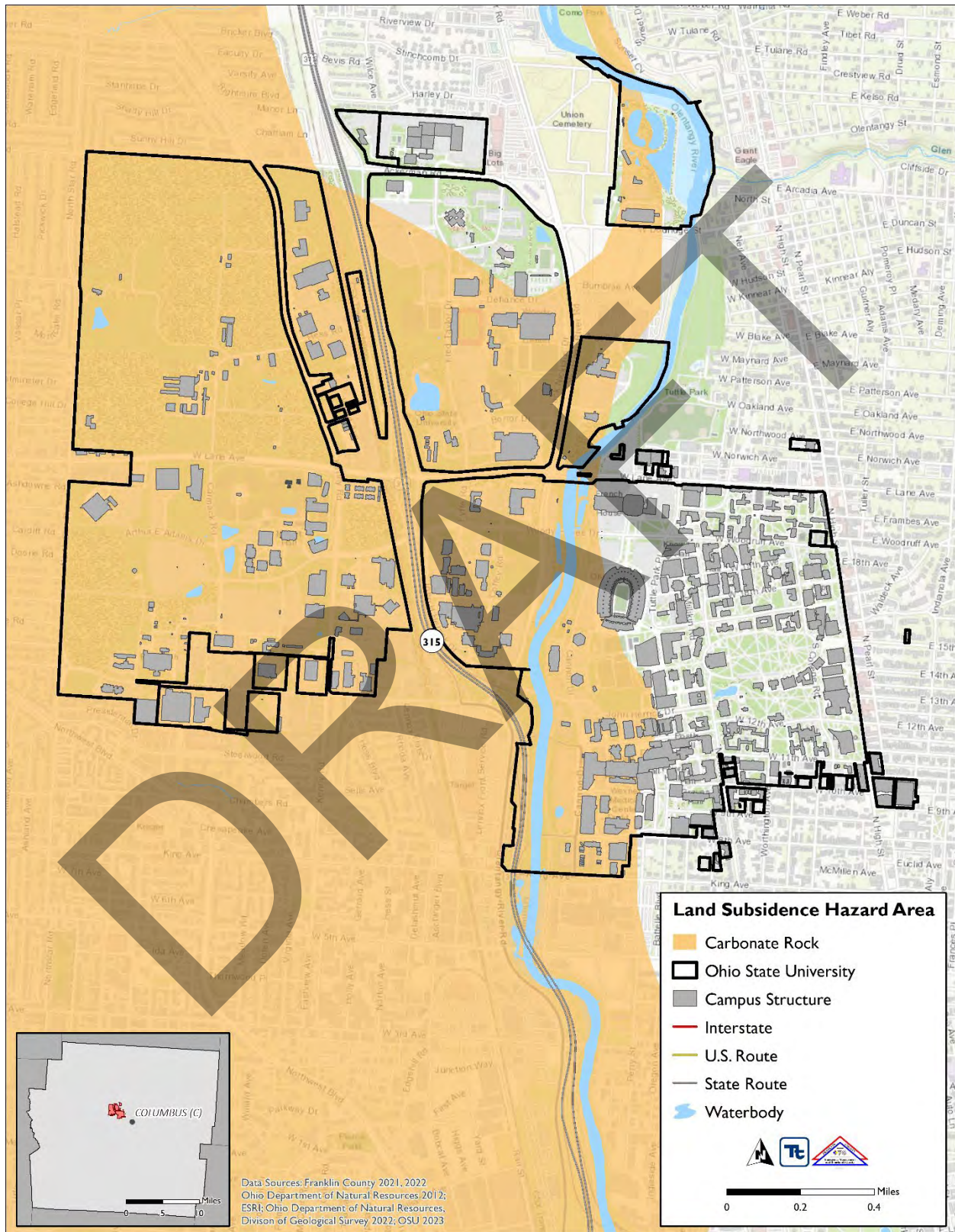


Figure 9.42-3. Ohio State University Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Ohio State University history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Ohio State University experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.42-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 26, 2018	EF-1 Tornado	N/A	Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage.	The University did not experience any notable damages or losses.
April 14, 2019	Thunderstorms	N/A	Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage.	The University did not experience any notable damages or losses.
March 2020-present	Covid-19 Pandemic (DR-4507)	Yes	As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths.	The University did not experience any notable damages or losses.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), each participating jurisdiction has differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Ohio State

University. The Ohio State University reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.42-14. Hazard Ranking Input

Hazard	Hazard Ranking
Dam/Levee Failure	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Low
Extreme Temperature	Medium
Flood	Medium
Geologic	Low
Invasive Species	Low
Severe Summer Weather	High
Severe Winter Weather	Medium
Tornadoes	Medium

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.42-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Ohio State University

	Critical Facilities	Lifelines
1-Percent Annual Chance Flood Event Hazard Area	-	-
0.2-Percent Annual Chance Flood Event Hazard Area	-	-
Inland Erosion (K-Factor: ≥ 0.49) Hazard Area	-	-
Subsidence (Karst/Carbonate Rock) Hazard Area	-	-
Alum Creek Dam Inundation (MH Breach) Hazard Area	-	-
Delaware Dam Inundation (MH Breach) Hazard Area	-	-

Source: Franklin County; Hazus 5.1

Identified Issues

In addition to the risk assessment, the Ohio State University identified the following vulnerabilities within its community:

- Critical facilities on campus, including hospital and research facilities, do not have an emergency back-up system.
- There are no written guidelines on how to prepare various sites on campus for impending storms.
- Staff and students on campus may be unaware of the University's hazard risks or how to prepare and react to those hazards.
- Hazards have impacted the structural and mechanical integrity of buildings in previous events.
- Debris from trees has caused power outages and other damages following storm events with high winds.
- The lightning systems on campus are outdated.

- Increased occurrences of winter weather have caused an increase in demand on the salt usage to create safe driving conditions and walking paths.

9.42.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

DRAFT

Table 9.42-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Continue to conduct an annual exercise for pandemic /epidemic response	Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center	Completed Operating Budget Refer to Responsible Party Column	-	-	-
Provide staff education and outreach concerning health related emergencies	Assistant Vice President and Director of Public Safety	Completed Operating Budget Refer to Responsible Party Column	-	-	-
Conduct annual updates to the Ohio State WMC Master Pandemic Plan	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center	Completed Operating Budget Refer to Responsible Party Column	-	-	-
Evaluate current building standards and evaluate changes to increase resilience to seismic events	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center	Discontinued	No	-	-
Install leak detection systems on utility infrastructure	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Develop a public education campaign to be delivered throughout the university conveying seismic risk	Assistant Vice President and Director of Public Safety	In Progress	Yes	The students and staff on the University campus may be unaware of the risks associated with seismic hazards.	Assistant Vice President and Director of Public Safety
Evaluate current building design standards and evaluate changes to increase resilience	Associate VP of Facilities, Operations and Development	In Progress	Yes	Floods can impact the structural integrity of buildings.	Associate VP of Facilities, Operations and Development
Develop and implement infrastructure improvements to existing storm and sanitary sewers	Associate VP of Facilities, Operations and Development	In Progress	Yes	Storm and sanitary sewer pipes become impacted during heavy rains and contribute to the flooding hazard experienced by the University.	Associate VP of Facilities, Operations and Development

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Develop a public education campaign to be delivered throughout the university conveying flood risk and actions	Assistant Vice President and Director of Public Safety	In Progress	Yes	The students and staff on the University campus may be unaware of the risks associated with the flood hazard.	Assistant Vice President and Director of Public Safety
Achieve StormReady Certification from NWS	Emergency Management/Fire Prevention	Completed Operating Budget Refer to Responsible Party Column	-	-	-
Expansion of tornado siren system on campus	Assistant Vice President and Director of Public Safety	Discontinued	No	-	-
Evaluate current building standards to ensure tornado safety for occupants	Associate VP of Facilities, Operations and Development	In Progress	Yes	Tornadoes can impact the structural integrity of buildings, causing danger to those inside it.	Associate VP of Facilities, Operations and Development
Evaluation of installation of tornado safe rooms on campus	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	Discontinued	No	-	-
Evaluate possibility of enhanced IT warning system for tornadic events (Message scroll on university computer systems)	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	Completed Operating Budget Refer to Responsible Party Column	-	-	-
Retrofit buildings to allow for communications from public safety dispatchers to building occupants	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	Discontinued	No	-	-
Develop a public education campaign to be delivered throughout the university.	Assistant Vice President and Director of Public Safety	In Progress	Yes	The students and staff on the University campus may be unaware of the risks associated with tornadic and wind hazards.	Assistant Vice President and Director of Public Safety
Achieve StormReady Certification from NWS	Emergency Management/Fire Prevention	Completed Operating Budget Refer to Responsible Party Column	-	-	-

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Develop site preparation plans for known storm events	Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development	In Progress	Yes	There is no written guide on how to prepare the various structures and building on campus for storm events.	Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development
Evaluate current building standards and evaluate changes to increase resilience	Assistant Vice President and Director of Public Safety	In Progress	Yes	Summer storms can impact the structural integrity of buildings.	Assistant Vice President and Director of Public Safety
Conduct a tree-trimming program on campus	Facilities Operations and Development /Grounds	In Progress	Yes	High winds from summer and winter storms cause tree limbs to snap which can impact infrastructure.	Facilities Operations and Development /Grounds
Upgrade and improve lightning systems on buildings	Various (Operations (incl. Med Center), Student Life, Athletics, Business Advancement)	In Progress	Yes	Current lighting systems on buildings are outdated and may be ineffective.	Various (Operations (incl. Med Center), Student Life, Athletics, Business Advancement)
Purchase and install an outdoor lightning warning system	Assistant Vice President and Director of Public Safety	Discontinued	No	-	-
Undertake structural projects to increase resilience of buildings to the effects of summer storms	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	In Progress	Yes	Summer storms can impact the structural integrity of buildings.	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management
Purchase additional generators for emergency power (research facilities, hospital facilities, other identified critical infrastructure) at structures that are not already equipped with backup power	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center	In Progress	Yes	Critical facilities do not have back-up emergency generators.	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center
Develop a public education campaign to be delivered	Assistant Vice President and Director of Public Safety	In Progress	Yes	The students and staff on the University campus may be unaware of the	Assistant Vice President and Director of Public Safety

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
throughout the university conveying summer storm risk				risks associated with summer storms.	
Use GIS to determine priority areas to clear snow/deposit snow	Director, Facilities Information Technologies Services (FITS)	Completed Operating Budget, FEMA HMA Programs Refer to Responsible Party Column	-	-	-
Develop site preparation plans for known storm events	Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development	In Progress	Yes	There is no written guide on how to prepare the various structures and building on campus for storm events.	Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development
Evaluate current building standards and evaluate changes to increase resilience	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	In Progress	Yes	Winter storms can impact the structural integrity of buildings.	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management
Integrate existing ground sensors into building automation systems	Director, Landscape Services	Discontinued	No	-	-
Develop a live monitoring system of snow removal equipment (similar to the City of Columbus Snow Warrior tracker)	Director, Landscape Services	Discontinued	No	-	-
Conduct a tree-trimming program on campus	Associate VP of Facilities, Operations and Development	In Progress	Yes	High winds from summer and winter storms cause tree limbs to snap which can impact infrastructure.	Associate VP of Facilities, Operations and Development
Undertake infrastructure improvements to install roadway heating/roof heating elements	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	Discontinued	No	-	-
Increase salt storage capacity to 2,000 tons	Director, Landscape Services	In Progress	Yes	Heavier snowfall and ice accumulations with winter storms cause the	Director, Landscape Services

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
				University's salt storage to deplete rapidly due to the increased needs.	
Undertake structural projects to increase resilience of buildings to the effects of winter storms	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	In Progress	Yes	Winter storms can impact the structural integrity of buildings.	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management
Purchase additional generators for emergency power (research facilities, hospital facilities, other identified critical infrastructure) at structures that are not already equipped with backup power	Various – Depending on ownership of building	In Progress	Yes	Critical facilities do not have back-up emergency generators.	Various – Depending on ownership of building
Develop a public education campaign to be delivered throughout the university conveying winter storm risk	Assistant Vice President and Director of Public Safety	In Progress	Yes	The students and staff on the University campus may be unaware of the risks associated with winter storms.	Assistant Vice President and Director of Public Safety
Evaluate infrastructure for the use of gray water	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Evaluate building plumbing systems to reduce water flow/usage	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Evaluate the use of secondary sources of natural water sources	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Develop a public education campaign to be delivered throughout the university conveying drought risk	Assistant Vice President and Director of Public Safety	In Progress	Yes	The students and staff on the University campus may be unaware of the risks associated with drought.	Assistant Vice President and Director of Public Safety

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Evaluate mechanical system and building envelope improvements in buildings to increase resilience to extreme cold temperatures	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	In Progress	Yes	Extreme Temperature can impact the mechanical and structural integrity of buildings.	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management
Develop and asset management system to track infrastructure integrity	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Ensure infrastructure system redundancy	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Evaluate building design standards for Extreme Temperature	Associate VP of Facilities, Operations and Development	Discontinued	No	-	-
Develop a public education campaign to be delivered throughout the university conveying extreme temperature risk	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center	In Progress	Yes	The students and staff on the University campus may be unaware of the risks associated with Extreme Temperature.	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Ohio State University identified the following mitigation efforts completed since the last HMP:

- No additional initiatives identified.

Since the adoption of the County's first HMP, the Ohio State University has made significant mitigation progress in the following areas:

- No additional mitigation progress identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Ohio State University participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.42-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	X	X	-	X	X	X	X	-	-	X
Disease Outbreak	-	X	-	X	-	X	X	-	-	X
Drought	-	X	-	X	-	X	X	-	-	X
Earthquake	X	X	-	X	X	X	X	-	-	X
Extreme Temperature	X	X	-	X	X	X	X	-	-	X
Flood	X	X	-	X	X	X	X	-	X	X
Geologic	X	X	-	X	X	X	X	-	-	X
Invasive Species	-	X	-	X	-	X	X	-	-	X
Severe Summer Weather	X	X	-	X	X	X	X	X	-	X
Severe Winter Weather	X	X	-	X	X	X	X	X	-	X
Tornadoes	X	X	-	X	X	X	X	X	-	X

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.43-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Ohio State University will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.42-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-OSU-001	Design Standards Evaluation	Evaluate current building and mechanical design standards and evaluate changes to increase resilience and safety.	Dam/Levee Failure, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornadoes	1	5 years	Associate VP of Facilities, Operations and Development; Assistant Vice President and Director of Public Safety; Student Life, Director of Risk and Emergency Management	University Funding	High	High	High	LPR	PR, PP
2023-OSU-002	Sewer Infrastructure Improvements*	Develop and implement infrastructure improvements to existing storm and sanitary sewers.	Flood	2	5 years	Associate VP of Facilities, Operations and Development	University Funding, BRIC	High	High	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-OSU-003	All Hazards Public Education Campaign	Develop a public all hazards education campaign to be delivered throughout the university, to both students and staff, conveying risks and actions.	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	5	5 years	Student Life, Director of Risk and Emergency Management; Associate VP of Facilities, Operations and Development; Safety and Emergency Preparedness Director, Wexner Medical Center; Assistant Vice President and Director of Public Safety	University Funding, HMGP	High	High	Medium	EAP	PI
2023-OSU-004	Site Preparation Plans for Storm Events*	Develop site preparation plans for known storm events.	Severe Summer Weather, Severe Winter Weather, Tornado	1	5 years	Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development	University Funding	Medium	Low	Medium	LPR	PR
2023-OSU-005	Tree Maintenance Program	Conduct a tree trimming program on campus.	Severe Summer Weather, Severe Winter Weather, Tornado	1	5 years	Facilities Operations and Development /Grounds	University Funding	High	High	Medium	LPR	PR, NR
2023-OSU-006	Lightning System Upgrades	Upgrade and improve lightning systems on buildings.	Severe Summer Weather	6	5 years	Various (Operations (incl. Med Center), Student Life, Athletics, Business Advancement)	University Funding	Medium	Medium	Low	SIP	PP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-OSU-007	Increase Building Resilience	Undertake structural projects to increase resilience of buildings to the effects of severe summer and winter weather.	Severe Summer Weather, Severe Winter Weather	6	5 years	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management	University Funding, BRIC	High	High	Low	SIP	PP
2023-OSU-008	Emergency Generators for Critical Facilities*	<p>Problem: The University has numerous facilities that are deemed critical that do not have backup power.</p> <p>Solution: Purchase additional generators for emergency power (research facilities, hospital facilities, other identified critical infrastructure) at structures that are not already equipped with backup power.</p>	Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes	6	5 years	Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center	University Funding, BRIC, HMGP	High	High	Medium	SIP	PP, ES
2023-OSU-009	Salt Storage Capacity	Increase salt storage capacity to 2,000 tons.	Severe Winter Weather	2	5 years	Director, Landscape Services	University Funding	High	High	Low	SIP	ES

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

FEMA Agency	Federal Emergency Management Agency	BRIC Program	Building Resilient Infrastructure and Communities Program	The estimated cost for implementation.
HMA	Hazard Mitigation Assistance			Benefits: A description of the estimated benefits, either quantitative and/or qualitative.
N/A	Not applicable			
NFIP	National Flood Insurance Program			

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.42-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-OSU-001	Design Standards Evaluation	1	1	1	1	1	0	1	1	0	1	1	1	1	0	11	High
2023-OSU-002	Sewer Infrastructure Improvements	0	1	1	1	1	0	1	1	0	1	0	1	1	0	9	High
2023-OSU-003	All Hazards Public Education Campaign	1	0	1	1	0	1	1	0	0	1	1	1	0	0	8	Medium
2023-OSU-004	Site Preparation Plans for Storm Events	0	1	1	1	0	1	1	0	0	1	1	1	0	0	8	Medium
2023-OSU-005	Tree Maintenance Program	0	0	1	1	0	0	1	0	0	1	1	1	0	0	6	Medium
2023-OSU-006	Lightning System Upgrades	0	1	1	1	0	0	0	0	0	0	0	1	0	0	4	Low
2023-OSU-007	Increase Building Resilience	0	0	1	1	0	0	0	0	0	0	1	1	0	0	4	Low
2023-OSU-008	Emergency Generators for Critical Facilities	1	1	1	1	1	0	0	-1	0	0	1	1	0	0	6	Medium
2023-OSU-009	Salt Storage Capacity	0	0	1	1	0	1	0	-1	0	1	0	1	0	0	4	Low

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).