Source: John Ridinger

PORTAGE COUNTY HAZARD MITIGATION PLAN

February 2021

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Portage COUNTY

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1 | Introduction

1.1 Overview

With the 2015 Portage County Multi-Jurisdictional Hazard Mitigation Plan set to expire in April of 2021, Portage County and its constituents are aiming to adopt a new, updated hazard mitigation plan. As outlined in the Disaster Mitigation Act of 2000 (DMA2K), any local jurisdiction seeking funding from the Federal Emergency Management Agency (FEMA) must maintain an up-to-date disaster mitigation plan. This Plan meets the criteria as set forth by FEMA in the DMA2k and provides the County and its participating jurisdictions with a comprehensive guide for future mitigation efforts to combat the hazards that affect their communities.

Natural, geological, and manmade hazards pose a variety of risks to the lives, businesses, and properties within Portage County. As such, a Core Planning Committee within Portage County has been established with the goal of developing and implementing the 2021 Portage County Hazard Mitigation Plan. Through cooperative efforts between local, county, state, and federal government agencies, this Plan is designed to minimize the adverse effects of hazardous events on the lives and properties of residents of Portage County.

The 2021 Portage County Hazard Mitigation Plan is a multi-jurisdictional plan which considers the impacts of hazards on incorporated areas (cities and villages) and unincorporated areas (townships). Portage County's incorporated and unincorporated areas are listed below in **Tables 1.1-1.2**. These jurisdictions are also displayed in **Figure 1.1** on the following page. The Plan is designed for a five-year implementation period and describes the methods and procedures utilized in its development, provides the results of community involvement activities such as survey collection, identifies the mitigation activities determined to the be most important to the County, and establishes a timeline for the implementation of the actions.

Table 1.1: Portage County Jurisdictions

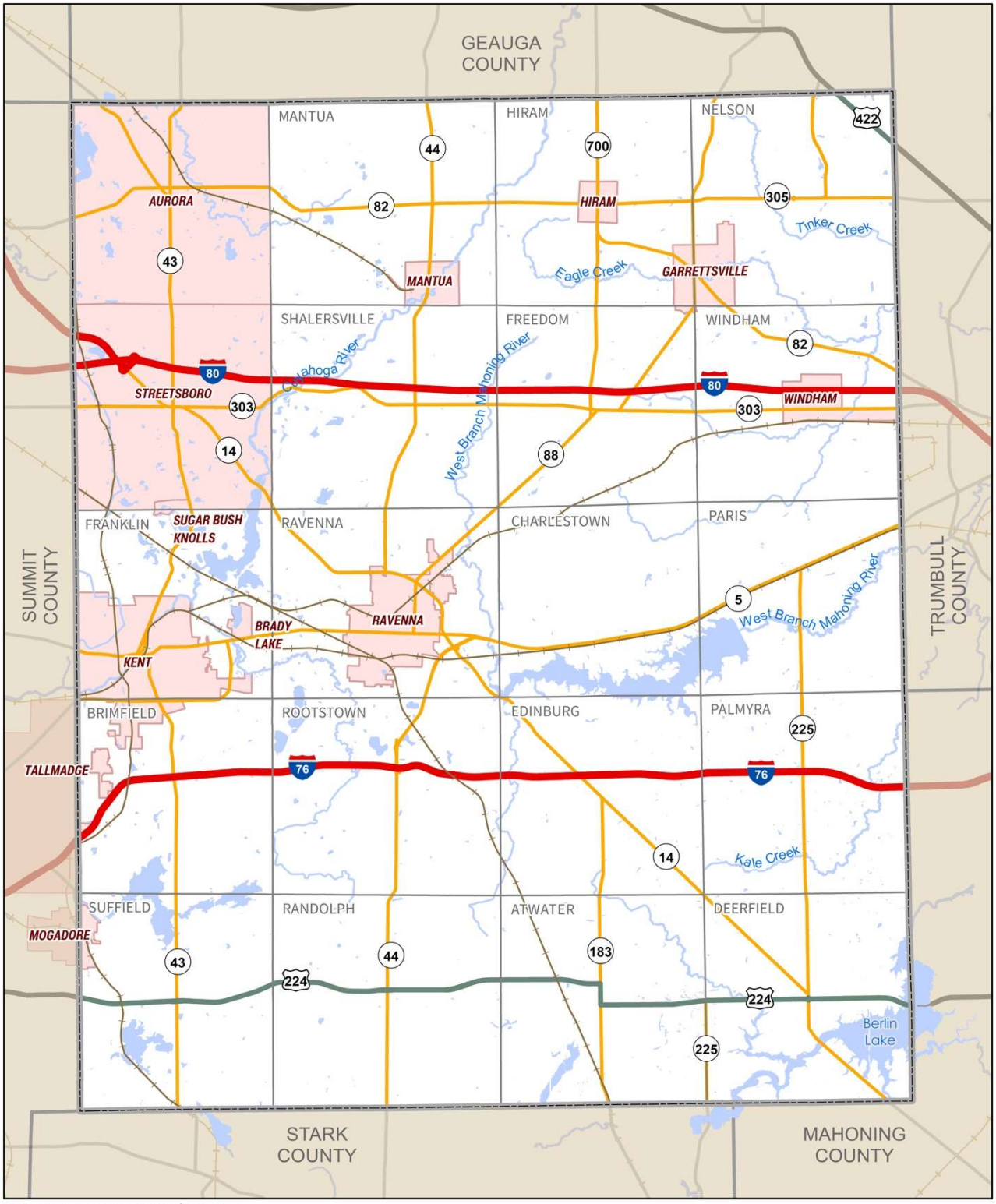
Jurisdictions
City of Aurora
City of Kent
City of Ravenna (county seat)
City of Streetsboro
City of Tallmadge*
Village of Garrettsville
Village of Hiram
Village of Mantua
Village of Mogadore*
Village of Sugar Bush Knolls
Village of Windham

Table 1.2: Portage County Townships

Townships	
Atwater Township	Nelson Township
Brimfield Township	Palmyra Township
Charlestown Township	Paris Township
Deerfield Township	Randolph Township
Edinburg Township	Ravenna Township
Franklin Township	Rootstown Township
Freedom Township	Shalersville Township
Hiram Township	Suffield Township
Mantua Township	Windham Township

*Please note: The City of Tallmadge and the Village of Mogadore are primarily located in Summit County and they will be participating fully in the Summit County Hazard Mitigation Plan Update. While some demographic and historic data are included in this Plan, both of these jurisdictions opted to participate in Summit County's Plan and did not participate in the Portage County Hazard Mitigation Plan.

Figure 1.1 Portage County Jurisdictions Map



Portage County Jurisdictions

N

Scale in Miles

0 1.5 3

This Plan is comprised of six sections, which detail the methods, analysis, and discussion surrounding the various hazards that threaten Portage County and its jurisdictions. These sections are as follows:

1. This **Introduction** (Section 1) provides a discussion about the general purpose and goals that Portage County wishes to achieve throughout the development and implementation of this Plan. This section also includes a summary of the Plan's contents.
2. Section 2, **History and Demographics**, includes a brief description of Portage County and each of the jurisdictions participating in this Plan, including their history, population, and other general information.
3. The process for the development of this Plan is detailed in Section 3, **Planning Process**. This section includes details about the process used to develop this Plan, including a description of who participated, how the community was involved, which hazards were included in the Plan and why, as well as how the Plan was developed through public meetings, reviews, and evaluations. This section also details the review and incorporation of existing plans, studies, reports, and technical information.
4. Section 4 contains the **Hazard Identification and Risk Assessment (HIRA)**. This section provides detailed descriptions and a corresponding analysis for each hazard that could potentially affect Portage County. The nature, location, extent, historical impact, vulnerability, and likelihood of occurrence for each hazard are provided for each hazard. These analyses include the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; an estimate of the potential dollar losses to vulnerable structures; and a general description of land uses and development trends within the community.
5. The goals, strategies, and actions for the County are then outlined in Section 5, **Hazard Mitigation**. The proposed actions are presented in tables, categorized by the associated hazard and community, and then ranked from highest to lowest priority based on feedback received from County officials and participating jurisdictions and stakeholders. Excluded hazards are also documented in this section, along with the rationale for exclusion from the Plan.
6. The final section of this Plan, **Schedule and Maintenance**, provides a summary of the proposed Plan adoption, integration, and maintenance schedule. This section describes how the County will review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within five years in order to continue to be eligible for mitigation project grant funding.

The resulting Portage County Hazard Mitigation Plan will be submitted to the Ohio Emergency Management Agency (Ohio EMA) and subsequently FEMA for their review. Following the agency review, the jurisdictions will then review the Plan for adoption. This hazard mitigation plan serves as a helpful tool for citizens, policymakers, local businesses, and other local stakeholders who all share a public interest in keeping Portage County as safe and resilient as possible. As such, this Plan aims to:

- Minimize property damage, economic loss, injury, and loss of human life – to achieve the Plan's main goal of reducing the impact of natural and manmade hazards on the County's economy and the well-being of its citizens.
- Enhance public awareness and education – to widen the public's understanding of natural and manmade hazards and how they might affect public health and safety, the environment, the local economy, and basic day-to-day operations.
- Coordinate inter-jurisdictional preparedness measures – to encourage and ensure multi-jurisdictional cooperation in County-wide mitigation actions and programs so that they may be implemented efficiently and effectively.
- Provide decision-making tools for interested stakeholders – to formulate a comprehensive, updated analysis of Portage County's vulnerability to hazards so that decision-makers can better prepare for natural and manmade disasters.

- Achieve regulatory compliance – to ensure that the County and its political subdivisions meet state and federal mitigation planning requirements so that they may be eligible to participate in and receive funding from grant programs, policies, and regulations.

1.2 Setting

Portage County is located in the northeast region of Ohio and has a total area of approximately 504 square miles. The County contains five cities, six villages and 18 townships **(Table 1.1 and Table 1.2**, above). The City of Ravenna serves as the County seat. Portage County is bounded by six counties: Geauga County to the north, Trumbull County to the east, Mahoning County to the southeast, Stark County to the south, Summit County to the west, and Cuyahoga County to the northwest.

Portage County is largely rural, with only three percent of the County deemed urban. There are several land uses in Portage County including vacant and active agriculture, vacant and active industrial, vacant and active commercial, vacant and active residential, government owned, public/quasi-public, park districts, and transportation (**Figure 1.2**). The most common land use in the County is agriculture. Land cover in Portage County is shown in **Figure 1.3**. Land cover types include developed/urban land, agricultural land, forested land, water, wetland, and barren land.

1.3 County Features

1.3.1 Transportation

Portage County contains many major roadways, including Interstates (I), US Routes (US), and State Routes (SR). Notably, the County contains stretches of the Ohio Turnpike, I-80, I-480, and I-76. Additional major roadways in Portage County include: US-224, US-422, SR-5, SR-14, SR-43, SR-44, SR-59, SR-82, SR-88, SR-183, SR-225, SR-261, SR-282, SR-303, SR-305, SR-306, and SR-700.

Portage County contains 20.350 miles of turnpike, 23.401 miles of interstate routes, 23.230 miles of US routes, and 204.228 miles of state routes. 117.041 miles of roadway within the County are part of the National Highway System. Additionally, the County contains 368.276 miles of county roads and 417.030 miles of township roads.

The Federal Aviation Administration (FAA) has record of nine aviation facilities in Portage County, including six airports, two heliports, and one balloon port. Five of the airports are privately owned, while the Portage County Airport is owned by the Portage County Airport Authority. The Portage County Airport is located in Shalersville Township. One heliport is owned by the Ohio Department of Transportation (ODOT) District 4. The second heliport is owned by University Hospitals Portage Medical Center. The balloon port is owned by the Goodyear Tire and Rubber Company and is located in Suffield Township.

The Ohio Department of Transportation (ODOT) has record of four active rail lines in Portage County, all of which transport freight. These active rail lines are listed in **Table 1.3**.

Table 1.3: Active Rail Lines in Portage County, Ohio

Railroad Reporting Mark	Railroad Name	Railroad Parent Company
AB	Akron Barberton Cluster Railway	Wheeling Corporation
CSXT	CSX Transportation, Inc.	CSX Corporation
NS	Norfolk Southern Railway	Norfolk Southern Corporation
WE	Wheeling & Lake Erie Railway	Wheeling Corporation

1.3.2 Natural Features

Portage County's principal streams, rivers, and bodies of water are listed in **Table 1.4**, below.

Table 1.4: Portage County Principal Streams, Rivers, and Bodies of Water

Barrel Run	Deer Creek	Muzzy Lake*
Berlin Reservoir*	Elliman Run	New Milford Creek
Bixon Creek	Geauga Lake	Plum Creek
Black Creek	Harmon Brook	Potter Creek
Brady Lake	Hinkley Creek	Sand Creek
Breakneck Creek	Lake Rockwell*	Silver Creek
Camp Creek	Little Cuyahoga River	South Fork Eagle Creek
Chagrin River	Mahoning Creek	Tinkers Creek
Clara Root Creek	Mahoning River	Twin Lakes*
Congress Lake Outlet	Michael J. Kirwan Reservoir	Willow Creek
Cranberry Creek	Mill Creek	Wingfoot Lake*
Cuyahoga River	Mogadore Reservoir*	

**Lakes annotated with an (*) indicate large reservoirs in Portage County that provide drinking water, dam hazards, and flooding hazards. These sites are also potential locations for future hazard mitigation projects.*

In addition to these principal streams, Portage County is home to West Branch State Park, which is located on the west branch of the Mahoning River. This state park contains 5,379 acres of meadows and woodlots and a 2,650-acre lake (Michael J. Kirwan Reservoir). The park also preserves a large beech-maple forest, which is home to a large variety of plant and animal species.

Nelson-Kennedy Ledges State Park also resides in Portage County. Nelson-Kennedy Ledges State Park is a 167-acre day-use park with four scenic hiking trails. The park has a rich history as home to a variety of Native American tribes.

Other nature preserves areas in Portage County include the Blanche Katherine Novak Wildlife Sanctuary and State Nature Preserve, Triangle Lake Bog State Nature Preserve, Herrick Fen Nature Preserve, and Eagle Creek Nature Preserve.

Figure 1.2: Portage County Land Use Map

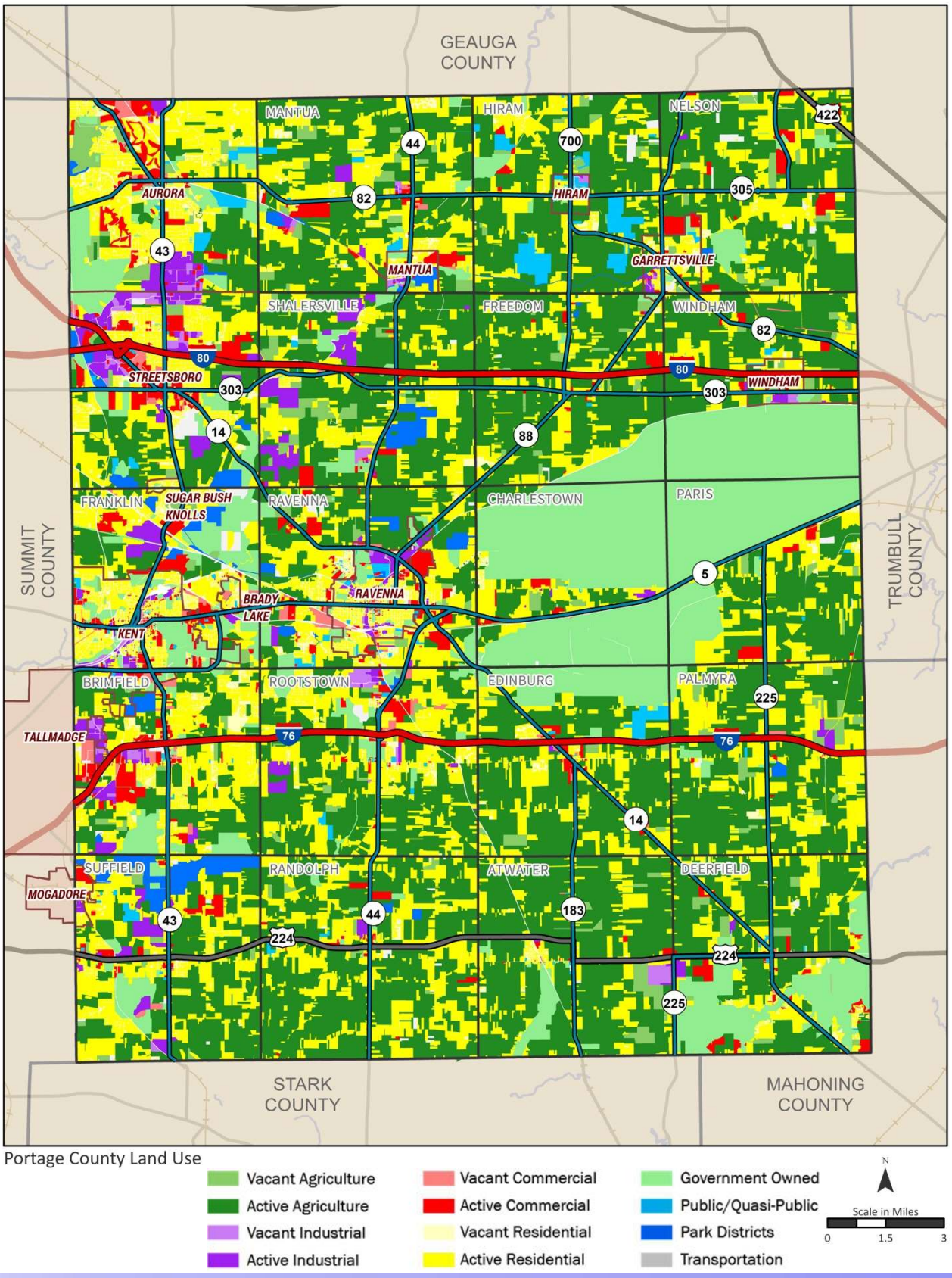
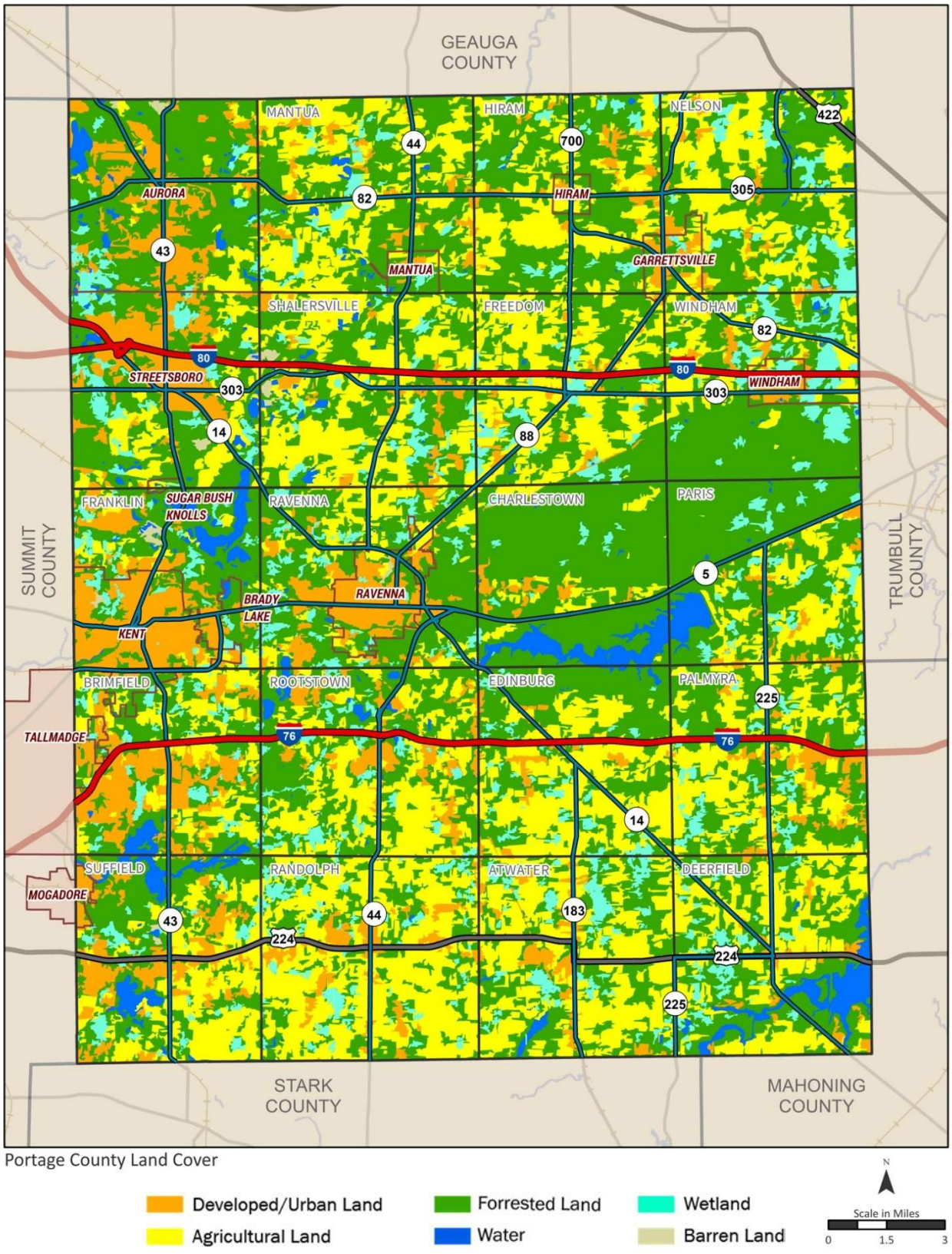


Figure 1.3: Portage County Land Cover Map



2 | History and Demographics

2.1 History

Portage County, Ohio was established in 1807 and named after the "portage" – or path – between the Cuyahoga and Tuscarawas Rivers where people portaged their canoes. The land that currently makes up Portage County was originally a portion of Jefferson County until it was made part of Trumbull County in 1800. On February 10, 1807 the Ohio state legislature passed the act to create Portage County from Trumbull County, which took effect in June 1807. In 1840, the present-day boundaries of Portage County were established following the creation of Medina and Summit counties and the readjustment of Cuyahoga County's boundaries.

Portage County is home to several museums including the Kent House Museum, the Kent Historical Society Museum, The Kent State University Museum, the Kent State School of Art Galleries, and the Cowrie-Lowrie-Beatty Portage County Historical Society Museum. The National Register of Historic Places also has record of 52 historic properties in Portage County, which are listed in **Table 2.1**.

Table 2.1: National Register of Historic Properties in Portage County, Ohio

Property Name	Address/Location	Jurisdiction
Atwater Congregational Church	1237 SR-183	Atwater
Aurora Center Historic District	Roughly both sides of SR-306 from & including Pioneer Trail to SR-82, also Maple Lane	Aurora
Aurora Train Station	13 New Hudson Road	Aurora
CR Howard House	411 E. Garfield Street	Aurora
Zeno Kent House	1119 Aurora-Hudson Road	Aurora
John Diver House and Storebuilding	9465 Akron-Canfield Road	Deerfield
Frederick Wadsworth House	4889 SR-14	Edinburg
Freedom Congregational Church	Public Green on SR-88	Freedom
Mott Drug Store	8107 Main Street	Garrettsville
James A. Garfield House	6825 Hinsdale Street	Hiram
John Johnson Farm	6203 Pioneer Trail	Hiram
Thomas F. Young House	Wakefield & Garfield Streets	Hiram
John Davey House	338 Woodard Street	Kent
Aaron Ferrey House	5058 Sunny Brook Road	Kent
Franklin Hotel	176 E. Main Street	Kent
Franklin Township Hall	218 Gougler Avenue	Kent
LN Gross Company Building	315 Gougler Avenue	Kent
Kent Industrial District	Roughly bounded by Main, River, & S Franklin Streets & south property line of Portage County	Kent
Kent Jail	947 Middlebury Road	Kent
Charles Kent House	125 N. Pearl Street	Kent
Masonic Temple	409 W. Main Street	Kent
May 4, 1970, Kent State Shootings Site	1/2 mi southeast of intersection of E. Main & S. Lincoln Streets	Kent

Property Name	Address/Location	Jurisdiction
Ohio State Normal College at Kent	Hilltop Drive on Kent State University campus	Kent
Arvin Olin House	1425 Ravenna Road	Kent
West Main Street District	409-625 W. Main Street	Kent
William H. Crafts House	4619 W. Prospect Street	Mantua
Horace L. Hine House	4624 W. Prospect Street	Mantua
Mantua Center School	11741 Mantua Center Road	Mantua
Mantua Station Brick Commercial District	Main & Prospect Streets	Mantua
Mantua Center District	Roughly bounded by SR-82 & Mantua Center Road	Mantua Center
Palmyra Center Hotel	SR-225 & SR-18	Palmyra
Horace Y. Beebe House	6538 Cleveland Road	Ravenna
John F. Byers House	5551 S. Prospect Street	Ravenna
Cleveland Worsted Mills Redfern Mill	S. Chestnut Street	Ravenna
Cottage Hill Farm	5555 Newton Falls Road	Ravenna
Crystal Lake Stock Farm	4655 Hayes Road	Ravenna
East Main Street Historic District	E Main St between Clinton & Linden Streets	Ravenna
Etna House	219 1/2 W. Main Street	Ravenna
Alexander B. Griffin House	417 S. Walnut Street	Ravenna
Luman Nelson House	8219 SR-44	Ravenna
Phoenix Block	NEC Main & Chestnut Streets	Ravenna
CA Reed House	229 W. Riddle Street	Ravenna
Riddle Block	Public Square - Chestnut & Main Streets	Ravenna
Riddle Block # 11	133-137 E. Main Street	Ravenna
Riddle Block # 5	141-145 E. Main Street	Ravenna
Riddle Block # 9	113-115 W. Main Street	Ravenna

Portage County is home to four colleges and universities, including Kent State University, Hiram College, Northeast Ohio Medical University, and a campus of Fortis College.

2.2 Communication Outlets

County communication outlets including websites, television, and social media are listed in **Table 2.2**, below:

Table 2.2: Communication Outlets and Social Media

Communication Type	Source
Website	https://www.co.portage.oh.us/
EMA Website	https://www.co.portage.oh.us/homeland-security-emergency-management
Social Media Links	https://www.co.portage.oh.us/government/pages/connect-us
Newspaper	Record-Courier (https://www.record-courier.com/)
Radio	89.7 WKSU-FM (Kent State University Public Radio) 90.3 WCPN-FM (Public Radio) 100.1 WNIR-FM (Talk of Akron, Ravenna Township)
Other	Integrated Public Alert and Warning System (IPAWS)

2.3 Demographics Overview

Table 2.3 provides a summary of the total population changes that have occurred in Portage County between the 2010 US Census and the 2018 American Community Survey (ACS). Accordingly, Portage County's population increased by 1,225 people (0.76 percent) between 2010 and 2018. Five of the 18 townships in Portage County grew in population between 2010 and 2018. Twelve of the 18 townships saw a population decrease, and one township (Mantua) maintained the same population.

Table 2.3: County/Township population growth estimates between 2010 Census and 2018 ACS

County/Township	Total Population 2010 Census	Total Population 2018 ACS	2010-2018	
			Population Change	Percent Change
Portage County	161,419	162,644	1,225	0.76%
Atwater Township	2,740	2,735	-5	-0.18%
Brimfield Township	10,376	10,378	2	0.02%
Charlestown Township	1,799	1,839	40	2.22%
Deerfield Township	2,822	2,817	-5	-0.18%
Edinburg Township	2586	2,574	-12	-0.46%
Franklin Township	5,527	5,501	-26	-0.47%
Freedom Township	2,843	2,846	3	0.11%
Hiram Township	2,411	2,396	-15	-0.62%
Mantua Township	4,811	4,811	0	0.00%
Nelson Township	3,148	3,139	-9	-0.29%
Palmyra Township	2,919	2,920	1	0.03%
Paris Township	1,744	1,706	-38	-2.18%
Randolph Township	5,298	5,306	8	0.15%
Ravenna Township	9,209	9,205	-4	-0.04%
Rootstown Township	8,225	8,215	-10	-0.12%
Shalersville Township	5,670	5,669	-1	-0.02%
Suffield Township	6,311	6,285	-26	-0.41%
Windham Township	1,865	1,714	-151	-8.10%

2.4 Portage County

Tables 2.4 to 2.6 summarize Portage County's population, housing statistics, and income statistics. The tables show that the County's population increased by 1,225 people (0.76 percent) from 2010 to 2018. For housing units, the County had a combined owned and rental housing vacancy rate of 9.9 percent. Related to income, the largest percentage of households (17.6 percent) had an income between $50,000 and $74,999; approximately 6.7 percent of households had an annual income less than $10,000.

Table 2.4: Portage County Population Totals 2010-2018

Year & Source	Population Total
2010 Census	161,419
2011 ACS Estimate	160,713
2012 ACS Estimate	161,178
2013 ACS Estimate	163,387
2014 ACS Estimate	161,553
2015 ACS Estimate	161,897
2016 ACS Estimate	161,796
2017 ACS Estimate	162,080
2018 ACS Estimate	162,644

Table 2.5: Portage County Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	68,834
Occupied Housing Units (Owned & Rented)	61,993
Vacant Housing Units (Owned & Rented)	6,841
Vacancy Rate of Owned & Rented Housing	9.9%

Table 2.6: Portage County Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	4,194
$10,000 to $14,999	3,033
$15,000 to $24,999	5,895
$25,000 to $34,999	6,028
$35,000 to $49,999	8,790
$50,000 to $74,999	10,923
$75,000 to $99,999	8,279
$100,000 to $149,999	8,902
$150,000 to $199,999	3,615
$200,000 or more	2,334
Median Household Income	$56,618
Mean Household Income	$74,270

2.5 City of Aurora

Tables 2.7 to 2.9 summarize the City of Aurora's population, housing statistics, and income statistics. The tables show that the City's population increased by 393 people (2.5 percent) from 2010 to 2018. For housing units, the City had a combined homeowner and rental vacancy rate of 5.0 percent, which is lower than that of the County. Related to income, the largest percentage of households (21.3 percent) had an income between $100,000 and $149,999; 1.9 percent of households had an annual income of less than $10,000.

Table 2.7: City of Aurora Population Totals 2010-2018

Year & Source	Population Total
2010 Census	15,548
2011 ACS Estimate	15,354
2012 ACS Estimate	15,461
2013 ACS Estimate	15,524
2014 ACS Estimate	15,568
2015 ACS Estimate	15,663
2016 ACS Estimate	15,712
2017 ACS Estimate	15,766
2018 ACS Estimate	15,941

Table 2.8: City of Aurora Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	6,482
Occupied Housing Units (Owned & Rented)	6,154
Vacant Housing Units (Owned & Rented)	328
Vacancy Rate of Owned & Rented Housing	5.0%

Table 2.9: City of Aurora Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	117
$10,000 to $14,999	186
$15,000 to $24,999	392
$25,000 to $34,999	454
$35,000 to $49,999	629
$50,000 to $74,999	759
$75,000 to $99,999	780
$100,000 to $149,999	1.313
$150,000 to $199,999	704
$200,000 or more	820
Median Household Income	$94,141
Mean Household Income	$122,786

2.6 City of Kent

Tables 2.10 to 2.12 summarize the City of Kent's population, housing statistics, and income statistics. The tables show that the City's population increased by 920 individuals (3.2 percent) between 2010 and 2018. For housing units, the City had a higher combined homeowner and rental vacancy rate than the County (17.8 percent). Related to income, the largest percentage of households (16.9 percent) had an income less than $10,000.

Table 2.10: City of Kent Population Totals 2010-2018

Year & Source	Population Total
2010 Census	28,904
2011 ACS Estimate	28,892
2012 ACS Estimate	29,076
2013 ACS Estimate	31,301
2014 ACS Estimate	29,367
2015 ACS Estimate	29,563
2016 ACS Estimate	29,761
2017 ACS Estimate	29,771
2018 ACS Estimate	29,824

Table 2.11: City of Kent Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	12,915
Occupied Housing Units (Owned & Rented)	10,617
Vacant Housing Units (Owned & Rented)	2,298
Vacancy Rate of Owned & Rented Housing	17.8%

Table 2.12: City of Kent Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	1,793
$10,000 to $14,999	816
$15,000 to $24,999	1,517
$25,000 to $34,999	1,054
$35,000 to $49,999	1,517
$50,000 to $74,999	1,688
$75,000 to $99,999	842
$100,000 to $149,999	854
$150,000 to $199,999	582
$200,000 or more	314
Median Household Income	$36,441
Mean Household Income	$55,331

2.7 City of Ravenna

Tables 2.13 to 2.15 summarize City of Ravenna's population, housing statistics, and income statistics. The tables show that the City's population decreased by 172 people (1.4 percent) from 2010 to 2018. For housing units, the City had a similar combined homeowner and rental vacancy rates to the County (9.5 percent). Related to income, the largest percentage of households (19 percent) had an income between $35,000 and $49,999; 9.6 percent of households had an annual income of less than $10,000.

Table 2.13: City of Ravenna Population Totals 2010-2018

Year & Source	Population Total
2010 Census	11,724
2011 ACS Estimate	11,777
2012 ACS Estimate	11,710
2013 ACS Estimate	11,653
2014 ACS Estimate	11,635
2015 ACS Estimate	11,642
2016 ACS Estimate	11,582
2017 ACS Estimate	11,530
2018 ACS Estimate	11,552

Table 2.14: City of Ravenna Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	5,607
Occupied Housing Units (Owned & Rented)	5,073
Vacant Housing Units (Owned & Rented)	534
Vacancy Rate of Owned & Rented Housing	9.5%

Table 2.15: City of Ravenna Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	488
$10,000 to $14,999	436
$15,000 to $24,999	748
$25,000 to $34,999	494
$35,000 to $49,999	965
$50,000 to $74,999	905
$75,000 to $99,999	495
$100,000 to $149,999	372
$150,000 to $199,999	117
$200,000 or more	53
Median Household Income	$39,785
Mean Household Income	$51,537

2.8 City of Streetsboro

Tables 2.16 to 2.18 summarize City of Streetsboro's population, housing statistics, and income statistics. The tables show that the City's population increased by 367 people (2.3 percent) from 2010 to 2018. For housing units, the City had a lower combined homeowner and rental vacancy rate than the County (5.6 percent). Related to income, the largest percentage of households (19.8 percent) had an income between $50,000 and $74,999; 4.2 percent of households had an annual income of less than $10,000.

Table 2.16: City of Streetsboro Population Totals 2010-2018

Year & Source	Population Total
2010 Census	16,028
2011 ACS Estimate	15,662
2012 ACS Estimate	15,911
2013 ACS Estimate	16,043
2014 ACS Estimate	16,152
2015 ACS Estimate	16,222
2016 ACS Estimate	16,224
2017 ACS Estimate	16,305
2018 ACS Estimate	16,395

Table 2.17: City of Streetsboro Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	7,089
Occupied Housing Units (Owned & Rented)	6,694
Vacant Housing Units (Owned & Rented)	395
Vacancy Rate of Owned & Rented Housing	5.6%

Table 2.18: City of Streetsboro Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	282
$10,000 to $14,999	238
$15,000 to $24,999	475
$25,000 to $34,999	668
$35,000 to $49,999	945
$50,000 to $74,999	1,325
$75,000 to $99,999	1,242
$100,000 to $149,999	1,031
$150,000 to $199,999	315
$200,000 or more	173
Median Household Income	$63,271
Mean Household Income	$73,232

2.9 City of Tallmadge

Tables 2.19 to 2.21 summarize City of Tallmadge's population, housing statistics, and income statistics. The tables show that the City's population remained relatively stable, decreasing by 44 people (0.25 percent) from 2010 to 2018. For housing units, the City had an approximate combined vacancy rate of 4.3 percent, which is lower than that of the County. Related to income, the largest percentage of households (20.1 percent) had an income between $100,000 and $149,999; 5.3 percent of households had an annual income of less than $10,000.

Table 2.19: City of Tallmadge Population Totals 2010-2018

Year & Source	Population Total
2010 Census	17,537
2011 ACS Estimate	17,421
2012 ACS Estimate	17,505
2013 ACS Estimate	17,492
2014 ACS Estimate	17,463
2015 ACS Estimate	17,459
2016 ACS Estimate	17,488
2017 ACS Estimate	17,506
2018 ACS Estimate	17,581

Table 2.20: City of Tallmadge Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	7,380
Occupied Housing Units (Owned & Rented)	7,062
Vacant Housing Units (Owned & Rented)	318
Vacancy Rate of Owned & Rented Housing	4.3%

Table 2.21: City of Tallmadge Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	378
$10,000 to $14,999	213
$15,000 to $24,999	656
$25,000 to $34,999	448
$35,000 to $49,999	947
$50,000 to $74,999	1,112
$75,000 to $99,999	1,077
$100,000 to $149,999	1,423
$150,000 to $199,999	534
$200,000 or more	274
Median Household Income	$69,823
Mean Household Income	$82,024

2.10 Village of Garrettsville

Tables 2.22 to 2.24 summarize Village of Garrettsville's population, housing statistics, and income statistics. The tables show that the Village's population increased by 269 people (11.6 percent) from 2010 to 2018. For housing units, the Village had a combined homeowner and rental vacancy rate of 7.0 percent, which is lower than the combined vacancy rate of the County. Related to income, the largest percentage of households (20.7 percent) had an income between $35,000 and $49,999; 2.8 percent of households had an annual income of less than $10,000.

Table 2.22: Village of Garrettsville Population Totals 2010-2018

Year & Source	Population Total
2010 Census	2,325
2011 ACS Estimate	2,658
2012 ACS Estimate	2,584
2013 ACS Estimate	2,777
2014 ACS Estimate	2,801
2015 ACS Estimate	2,937
2016 ACS Estimate	2,870
2017 ACS Estimate	2,991
2018 ACS Estimate	2,594

Table 2.23: Village of Garrettsville Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	1,164
Occupied Housing Units (Owned & Rented)	1,082
Vacant Housing Units (Owned & Rented)	82
Vacancy Rate of Owned & Rented Housing	7.0%

Table 2.24: Village of Garrettsville Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	30
$10,000 to $14,999	51
$15,000 to $24,999	99
$25,000 to $34,999	119
$35,000 to $49,999	224
$50,000 to $74,999	201
$75,000 to $99,999	168
$100,000 to $149,999	129
$150,000 to $199,999	42
$200,000 or more	19
Median Household Income	$51,607
Mean Household Income	$68,506

2.11 Village of Hiram

Tables 2.25 to 2.27 summarize Village of Hiram's population, housing statistics, and income statistics. The tables show that the Village's population decreased by 134 people (9.5 percent) from 2010 to 2018. For housing units, the Village had a combined homeowner and rental vacancy rate of 16.7 percent, which is greater than that of the County. Related to income, the largest percentage of households (26.8 percent) had an income between $75,000 and $99,999; 3.9 percent of households had an annual income of less than $10,000.

Table 2.25: Village of Hiram Population Totals 2010-2018

Year & Source	Population Total
2010 Census	1,406
2011 ACS Estimate	1,227
2012 ACS Estimate	1,177
2013 ACS Estimate	1,301
2014 ACS Estimate	1,338
2015 ACS Estimate	1,279
2016 ACS Estimate	1,320
2017 ACS Estimate	1,294
2018 ACS Estimate	1,272

Table 2.26: Village of Hiram Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	246
Occupied Housing Units (Owned & Rented)	205
Vacant Housing Units (Owned & Rented)	41
Vacancy Rate of Owned & Rented Housing	16.7%

Table 2.27: Village of Hiram Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	8
$10,000 to $14,999	0
$15,000 to $24,999	8
$25,000 to $34,999	15
$35,000 to $49,999	29
$50,000 to $74,999	47
$75,000 to $99,999	55
$100,000 to $149,999	18
$150,000 to $199,999	8
$200,000 or more	17
Median Household Income	$70,625
Mean Household Income	$89,125

2.12 Village of Mantua

Tables 2.28 to 2.30 summarize Village of Mantua's population, housing statistics, and income statistics. The tables show that the Village's population increased by 161 people (15.4 percent) from 2010 to 2018. For housing units, the Village had a combined homeowner and rental vacancy rate of 7.4 percent, which is less than that of the County. Related to income, the largest percentage of households (17.6 percent) had an income between $75,000 and $99,999; 9.1 percent of households had an annual income of less than $10,000.

Table 2.28: Village of Mantua Population Totals 2010-2018

Year & Source	Population Total
2010 Census	1,043
2011 ACS Estimate	1,002
2012 ACS Estimate	1,018
2013 ACS Estimate	1,196
2014 ACS Estimate	1,295
2015 ACS Estimate	1,248
2016 ACS Estimate	1,153
2017 ACS Estimate	1,116
2018 ACS Estimate	1,204

Table 2.29: Village of Mantua Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	544
Occupied Housing Units (Owned & Rented)	504
Vacant Housing Units (Owned & Rented)	40
Vacancy Rate of Owned & Rented Housing	7.4%

Table 2.30: Village of Mantua Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	46
$10,000 to $14,999	48
$15,000 to $24,999	46
$25,000 to $34,999	65
$35,000 to $49,999	61
$50,000 to $74,999	49
$75,000 to $99,999	89
$100,000 to $149,999	77
$150,000 to $199,999	19
$200,000 or more	4
Median Household Income	$47,500
Mean Household Income	$61,553

2.13 Village of Mogadore

Tables 2.31 to 2.33 summarize Village of Mogadore's population, housing statistics, and income statistics. The tables show that the Village's population decreased by 208 people (5.4 percent) from 2010 to 2018. For housing units, the Village had a combined homeowner and rental vacancy rate of 4.4 percent, which is less than that of the County. Related to income, the largest percentage of households (26.5 percent) had an income between $50,000 and $74,999; 1.1 percent of households had an annual income of less than $10,000.

Table 2.31: Village of Mogadore Population Totals 2010-2018

Year & Source	Population Total
2010 Census	3,853
2011 ACS Estimate	3,919
2012 ACS Estimate	3,949
2013 ACS Estimate	3,824
2014 ACS Estimate	3,925
2015 ACS Estimate	3,792
2016 ACS Estimate	3,662
2017 ACS Estimate	3,743
2018 ACS Estimate	3,645

Table 2.32: Village of Mogadore Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	1,362
Occupied Housing Units (Owned & Rented)	1,302
Vacant Housing Units (Owned & Rented)	60
Vacancy Rate of Owned & Rented Housing	4.4%

Table 2.33: Village of Mogadore Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	15
$10,000 to $14,999	34
$15,000 to $24,999	200
$25,000 to $34,999	79
$35,000 to $49,999	113
$50,000 to $74,999	345
$75,000 to $99,999	266
$100,000 to $149,999	160
$150,000 to $199,999	57
$200,000 or more	33
Median Household Income	$66,061
Mean Household Income	$70,882

2.14 Village of Sugar Bush Knolls

Tables 2.34 to 2.36 summarize Village of Sugar Bush Knolls' population, housing statistics, and income statistics. The tables show that the Village's population increased by 19 people (10.7 percent) from 2010 to 2018. For housing units, the Village had a combined homeowner and rental vacancy rate of 2.4 percent, which is less than that of the County. Related to income, the largest percentage of households (28.7 percent) had an income between $100,000 and $149,999; 1.2 percent of households had an annual income of less than $10,000.

Table 2.34: Village of Sugar Bush Knolls Population Totals 2010-2018

Year & Source	Population Total
2010 Census	177
2011 ACS Estimate	168
2012 ACS Estimate	178
2013 ACS Estimate	135
2014 ACS Estimate	158
2015 ACS Estimate	172
2016 ACS Estimate	193
2017 ACS Estimate	177
2018 ACS Estimate	196

Table 2.35: Village of Sugar Bush Knolls Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	82
Occupied Housing Units (Owned & Rented)	80
Vacant Housing Units (Owned & Rented)	2
Vacancy Rate of Owned & Rented Housing	2.4%

Table 2.36: Village of Sugar Bush Knolls Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	1
$10,000 to $14,999	1
$15,000 to $24,999	2
$25,000 to $34,999	2
$35,000 to $49,999	1
$50,000 to $74,999	13
$75,000 to $99,999	8
$100,000 to $149,999	23
$150,000 to $199,999	10
$200,000 or more	19
Median Household Income	$106,667
Mean Household Income	$137,815

2.15 Village of Windham

Tables 2.37 to 2.39 summarize Village of Windham's population, housing statistics, and income statistics. The tables show that the Village's population decreased by 221 people (10.0 percent) from 2010 to 2018. For housing units, the Village had a combined homeowner and rental vacancy rate of 19.4 percent, which is greater than that of the County. Related to income, the largest percentage of households (20.7 percent) had an income between $50,000 and $74,999; 14.3 percent of households had an annual income of less than $10,000.

Table 2.37: Village of Windham Population Totals 2010-2018

Year & Source	Population Total
2010 Census	2,209
2011 ACS Estimate	2,166
2012 ACS Estimate	2,136
2013 ACS Estimate	2,132
2014 ACS Estimate	1,998
2015 ACS Estimate	1,852
2016 ACS Estimate	1,959
2017 ACS Estimate	1,928
2018 ACS Estimate	1,988

Table 2.38: Village of Windham Housing Statistics 2018 Estimate

Housing Statistics	Number
Total Housing Units	922
Occupied Housing Units (Owned & Rented)	743
Vacant Housing Units (Owned & Rented)	179
Vacancy Rate of Owned & Rented Housing	19.4%

Table 2.39: Village of Windham Income Statistics 2018 Estimate

Household Income Statistics	Number of Households
Less than $10,000	106
$10,000 to $14,999	54
$15,000 to $24,999	96
$25,000 to $34,999	114
$35,000 to $49,999	104
$50,000 to $74,999	155
$75,000 to $99,999	63
$100,000 to $149,999	29
$150,000 to $199,999	16
$200,000 or more	6
Median Household Income	$35,536
Mean Household Income	$45,971

3 | Planning Process

3.1 Methodology

The Planning Process chapter describes the steps involved in the development of the Portage County Hazard Mitigation Plan, including details about who participated, how community involvement was organized and promoted throughout the community, what hazards were included in the Plan and why, as well as how stakeholder involvement played a critical role in the planning process. This chapter also explains how the Core Planning Committee was formed and how member feedback contributed to the updating of the County's Hazard Mitigation Plan.

3.2 Existing Plans and Regulations

Portage County and the State of Ohio maintains several plans and tools that were pertinent to reference in the development of the 2021 Hazard Mitigation Plan, including:

- 2015 Portage County Multi-Jurisdictional Hazard Mitigation Plan
- 2019 State of Ohio Hazard Mitigation Plan (SOHMP)
- Portage County Subdivision Regulations
- Portage County Floodplain Regulations
- City of Kent Comprehensive Plan

3.3 Portage County Authority to Adopt Plan

Table 3.1 lists the existing authorities and regulations in plan in Portage County and its municipalities.

Table 3.1: Existing Authorities and Regulations in Portage County's Municipalities

Community	Planning Commission	Comprehensive Plan	Floodplain Regulations	Building Codes	Zoning Ordinances	Capital Budget	Public Works Budget
Portage County	Yes	Yes	Yes	Yes	Yes	General Fund	General Fund
City of Aurora	Yes	Yes	Yes	Yes	Yes	General Fund	General Fund
City of Kent	Yes	Yes	Yes	Yes	Yes	General Fund	General Fund
City of Ravenna	Yes	Yes	Yes	Yes	Yes	General Fund	General Fund
City of Streetsboro	Yes	Yes	Yes	Yes	Yes	General Fund	General Fund
City of Tallmadge	No	Yes	Yes	Yes	Yes	General Fund	General Fund
Village of Garrettsville	Yes	County Shared	Yes	Yes	Yes	General Fund	General Fund
Village of Hiram	Yes	County Shared	Yes	Yes	Yes	General Fund	General Fund

Community	Planning Commission	Comprehensive Plan	Floodplain Regulations	Building Codes	Zoning Ordinances	Capital Budget	Public Works Budget
Village of Mantua	Yes	County Shared	Yes	Yes	Yes	General Fund	General Fund
Village of Mogadore	Yes	County Shared	Yes	Yes	Yes	General Fund	General Fund
Village of Sugar Bush Knolls	Yes	County Shared	Yes	Yes	Yes	General Fund	General Fund
Village of Windham	Yes	County Shared	Yes	Yes	Yes	General Fund	General Fund

3.4 Notification Process

Core Planning Committee members were invited to participate at the beginning of the planning process through a Kickoff Meeting announcement. Prior to each additional meeting, members of the Core Planning Committee will be invited to participate via an email notification. Additionally, press releases will be issued. Stakeholders and the public were also encouraged to participate via social media. Documentation of this notification process is included in **Appendix G**. Representatives from the following entities were invited to participate in the planning process. Additionally, **Table 3.2** lists the participating jurisdictions and representatives and how they participated.

Portage County

- Portage County Building Department
- Portage County Commissioners
- Portage County Economic Development
- Portage County Emergency Medical Services
- Portage County Engineer
- Portage County GIS
- Portage County Health District
- Portage County Homeland Security & Emergency Management
- Portage County Job & Family Services
- Portage County Regional Planning Commission
- Portage County Sheriff's Office
- Portage County Storm Water Management
- Portage County Water Resources Department
- Portage Park District
- Portage Soil & Water Conservation District

City and Village Members

- City of Aurora
- City of Kent
- City of Ravenna
- City of Streetsboro
- City of Tallmadge
- Village of Garrettsville
- Village of Hiram
- Village of Mantua
- Village of Mogadore
- Village of Sugar Bush Knolls
- Village of Windham

Township Members

- Atwater Township
- Brimfield Township
- Charlestown Township
- Deerfield Township

- Edinburg Township
- Franklin Township
- Freedom Township
- Hiram Township
- Mantua Township
- Nelson Township
- Palmyra Township
- Paris Township
- Randolph Township
- Ravenna Township
- Rootstown Township
- Shalersville Township
- Suffield Township
- Windham Township

Local Schools and Universities

- Aurora City School District
- Crestwood Local School District
- James A Garfield Local School District
- Field Local School District
- Kent City School District
- Ravenna School District
- Maplewood Career Center
- Rootstown Local School District
- Southeast Local School District
- Streetsboro City School District
- Waterloo Local School District
- Windham Exempted Village School District

Neighboring County EMAs, including Summit, Geauga, Trumbull, Mahoning and Stark counties were also invited to participate.

Table 3.2: Participating Jurisdictions

Community/Organization	Representative(s)	Meetings Attended		
		1	2	Other
Portage County				
Portage County EMA	Ryan Shackleford, EMA Director Brett Lee, Deputy Director Patricia Corley, Administrative Specialist	✓	✓	✓
Portage County Building Department	Randy Roberts, Director Joseph Bodnar, Deputy Director	✓		
Portage County GIS	Joe Reichlin, GIS Manager	✓		
Portage County Engineer	Mickey Marozzi, County Engineer Larry B. Jenkins, Jr., Assistant County Engineer	✓	✓	
Portage County Commissioners	Kathleen Clyde, Commissioner Sabrina Christian-Bennett, Commissioner	✓	✓	
Portage County Soil & Water Conservation District	James Bierlair, District Coordinator	✓	✓	
Portage County Health District	Robert Walker, PHEP Coordinator	✓		
Portage County Water Resources	Gene Roberts, Director	✓	✓	
Portage County Recorder	Lori Calcei, County Recorder	✓		
Portage County Regional Planning Commission	Todd Peetz, Director		✓	✓

Community/Organization	Representative(s)	Meetings Attended		
		1	2	Other
Cities & Villages				
City of Aurora	David Barnes, Fire Chief Brian Byard, Chief of Police Lt. Rob Hagquist	✓	✓	
City of Kent	Melanie Baker, Public Service Director John Tosko, Fire Chief	✓	✓	
City of Ravenna	Frank Seman, Mayor Geoff Cleveland, Fire Chief Bob Finney, Engineer Tim Contant, Safety Compliance Officer	✓		
City of Streetsboro	Kevin Grimm, Fire Captain			✓
City of Tallmadge	Ben Stasik, Deputy Fire Chief	✓		
Village of Garrettsville	Rick Patrick, Mayor David Friess, Fire Chief			✓
Village of Hiram	Lou Bertrand, Mayor Bill Byers, Fire Chief			✓
Village of Mantua	Linda Clark, Mayor John Trew, Village Administrator			✓
Village of Mogadore	Ben Stasik, Firefighter	✓		
Village of Sugar Bush Knolls	John M. Guidubaldi, Mayor Elizabeth Hartley, Village Council			✓
Village of Windham	Scott Garrett, Mayor Debbie Blewitt, Village Administrator Rich Gano, Fire Chief			✓

If representatives were unable to attend the in-person Core Planning Committee meetings, they participated via "Other" formats, including online surveys, as documented in ***Appendix G****.*

Core Planning Committee members were invited to participate at the beginning of the planning process through a Kickoff Meeting announcement which was sent out via email. Prior to each additional meeting, members of the Core Planning Committee will be invited to participate via an email notification. Members of the public will be encouraged to attend public meetings through press releases and social media announcements.

3.5 Meetings

The following section details the meetings that took place during the planning process. Documentation of each meeting, including newspaper postings, email announcements and attachments, meeting materials, and completed surveys can be found in **Appendix G**.

3.5.1 Core Planning Committee Kick-off

A Kickoff Announcement was emailed to stakeholders on November 4, 2019, inviting them to participate in the 2021 Portage County Hazard Mitigation Plan update process as part of the Core Planning Committee. The Announcement outlined the following details regarding the planning process:

- Goals of the Hazard Mitigation Plan.

- A summary of who is involved in the planning process.
- Federal requirements of the hazard mitigation planning process.
- An overview of the hazard mitigation planning process.
- The proposed schedule for the Portage County Plan update.
- The role of the Core Planning Committee in the update process.
- Contact information for both Portage County EMA and Burton Planning Services.
- Dates and times of the Core Planning Meetings.

3.5.2 Core Planning Committee Meeting 1

The first Core Planning Committee meeting took place on February 13, 2020 at 2:00 PM at the Maplewood Career Center (7075 State Route 88, Ravenna, Ohio 44266). This meeting was announced to the Core Planning Committee via email on February 3, 2020 (see **Appendix G** for all meeting notices documentation). A total of 42 people attended this meeting, including three representatives from the Portage County Emergency Management Agency, two representatives from Burton Planning Services, and one representative from GPD Group.

The meeting began with a brief introduction from Ryan Shackelford, the Portage County EMA Director. Kevin Buettner, Associate Planner at Burton Planning Services, then guided the attendees through a presentation which detailed the hazard mitigation planning process, including requirements of the planning process, potential hazards that could be addressed, benefits of hazard mitigation planning, and potential types of projects that could be federally funded as a result of the hazard mitigation plan.

Mr. Buettner also described the role that the Core Planning Committee would serve in the development of the 2021 Portage County Hazard Mitigation Plan. Following the completion of the presentation, Mr. Buettner guided the attendees through the following surveys:

Goals Survey:

The purpose of this survey was to reflect on the goals included in the 2015 Multi-Jurisdictional Hazard Mitigation Plan to determine if they were still relevant to the 2021 Plan. Each attendee reviewed the previous goals and determined if they were still applicable, provided comments or edits to the goals that needed changed, and generated new goals to potentially be included in the Plan.

Hazard Priority Survey:

The purpose of this survey was to review all hazards that could be included in the 2021 Hazard Mitigation Plan and prioritize them. As such, attendees were asked to rate each hazard on a scale of zero to five, with five meaning the hazard poses the greatest possible threat to the County or their community and zero meaning the hazard should not be included in the 2021 Plan. Attendees rated hazards that were included in the 2015 Multi-Jurisdictional Hazard Mitigation Plan, as well as all potential hazards that could be included in the 2021 Plan.

Following the completion of this survey, Mr. Buettner guided a discussion on which hazards were deemed most important and which hazards attendees did not think needed to be included. Erosion was mentioned as a potential hazard, and invasive species needed to be refined further to include plants and insects. Utility Failures and Cyber-attacks were also mentioned by Mr. Shackelford as being important considerations.

Previous Mitigation Actions Status and Scoring Matrix

The purpose of the Previous Mitigation Actions Survey was to have attendees review the mitigation actions that were included in the 2015 Multi-Jurisdictional Hazard Mitigation Plan, reflect on the status of each action, and determine if that action should be included in the 2021 Hazard Mitigation Plan.

3.5.3 Public Meeting 1

The first Public Meeting took place on Thursday, February 13, 2020 at 5:00 at the Maplewood Career Center (7075 State Route 88, Ravenna, OH 44266). A total of 12 people attended, including three representatives from the Portage County Emergency Management Agency, two representatives from Burton Planning Services, and one each from GPD Group and Ohio EMA. This meeting was announced to the Core Planning Committee via email and a press release was issued to *Record-Courier* on February 4, 2020. The public was also notified via social media (see **Appendix G** for all meeting notices documentation).

The meeting began with a brief introduction from Kevin Buettner, Associate Planner at Burton Planning Services. Mr. Buettner then guided the attendees through a presentation which detailed the hazard mitigation planning process, including requirements of the planning process, potential hazards that could be addressed, benefits of hazard mitigation planning, and potential types of projects that could be federally funded as a result of the hazard mitigation plan.

Following the completion of the presentation, Mr. Buettner guided the attendees through the Goals Survey, the Hazard Priority Survey, and the Previous Mitigation Action Status and Scoring Matrix, which are described above.

Two attendees at the Public Meeting were members of the Core Planning Committee who were unable to attend the 2:00 PM meeting on the same day. These members included representatives of jurisdictions within Portage County.

3.5.4 Core Planning Committee Meeting 2

The second Core Planning Committee meeting took place on Thursday, July 23, 2020 at 2:00 PM. Due to the COVID-19 Pandemic, this meeting was held virtually using Zoom. Members of the Core Planning Committee were invited to either attend using the GoToMeeting app on their phone or desktop or call into the meeting using a phone number. A total of 29 people attended the meeting, including three representatives from Burton Planning Services (BPS) and the Director, Deputy Director, and Administrative EM Specialist of the Portage County Emergency Management Agency.

The meeting began with a brief introduction from Anna van der Zwaag, Associate Planner at Burton Planning Services. Ms. van der Zwaag then guided the attendees through a presentation which provided an update on the hazard mitigation planning process, including requirements of the planning process, and results from the Hazard Priority survey distributed at the previous meeting.

Following the completion of the presentation, Ms. van der Zwaag guided the attendees through the Mitigation Actions Scoring Matrix, which determines the mitigation actions attendees would like to see in their community to mitigate the impacts of hazards. Attendees were provided a list of proposed mitigation actions and were asked if the action was relevant to their community. If attendees indicated that the mitigation action was relevant, attendees were asked to score the mitigation action in five categories: cost effective, technically feasible, environmentally sound, immediate need, and total risk reduction. These scores will be used to determine the priority of all mitigation actions included in the 2021 Hazard Mitigation Plan. There was both a printable and digital version of this survey to accommodate different needs.

3.5.5 Public Meeting 2

The second public meeting took place on Thursday, July 23, 2020 at 5:00 PM. Due to the COVID-19 Pandemic, this meeting was held virtually using Zoom. Members of the public were invited to either attend using the GoToMeeting app on their phone or desktop or call into the meeting using a phone number. A total of 8 people attended the meeting, including three representatives from Burton

Planning Services (BPS) and the Director and Deputy Director of the Portage County Emergency Management Agency.

The meeting began with a brief introduction from Anna van der Zwaag, Associate Planner at Burton Planning Services. Ms. van der Zwaag then guided the attendees through a presentation which provided an update on the hazard mitigation planning process, including requirements of the planning process, and results from the Hazard Priority survey distributed at the previous meeting.

Following the completion of the presentation, Ms. van der Zwaag guided the attendees through the Mitigation Actions Scoring Matrix, which determines the mitigation actions attendees would like to see in their community to mitigate the impacts of hazards. Attendees were provided a list of proposed mitigation actions and were asked if the action was relevant to their community. If attendees indicated that the mitigation action was relevant, attendees were asked to score the mitigation action in five categories: cost effective, technically feasible, environmentally sound, immediate need, and total risk reduction. These scores will be used to determine the priority of all mitigation actions included in the 2021 Hazard Mitigation Plan. There was both a printable and digital version of this survey to accommodate different needs.

Members of the public who attended brought several concerns to the forefront of the conversation during the meeting, including an increased discussion on the COVID-19 pandemic, as well as a discussion on food distribution and access in the event of a disaster. A discussion was held covering the issues related to radiation, potential failure of nuclear power plants, and potential mitigation actions. Additionally, members of the public were concerned with the lack of direct discussion related to climate change included in the previous plan. Discussion then took place around the concept of how to directly address climate change in the update.

3.6 Public Comment Period

The 2021 Portage County Hazard Mitigation Plan was made available to the public and Core Planning Committee for review in December of 2020. The Plan was made available via the project website (www.burtonplanning.com/portage-hmp). Both physical and digital surveys were provided to the public and the Core Planning Committee for their comments on the Plan.

3.7 Planning Process

Stakeholder and public input were essential for determining the hazard prioritization, as well as which hazards were included or excluded from the Plan. Based on feedback from the Core Planning Committee, it was determined that hurricanes or tropical storms were not hazards of concern to Portage County and its communities. As such, these hazards were not included in the plan outright. If remnants of a hurricane or tropical storm were witnessed in the County, those narratives are included in Severe Summer Storms. Other hazards, such as coastal erosion and coastal flooding, are not applicable to Portage County and have not been included in previous hazard mitigation plans, nor were they included in this Plan. More details about how survey feedback assisted in the determination of which hazards to exclude can be found in **Chapter 5, Hazard Mitigation**.

Chapter 4, Hazard Identification and Risk Assessment follows this chapter. Please note that Chapter 4 is organized alphabetically and not in order of risk. The ranking of hazard priorities can be found in **Chapter 5, Hazard Mitigation**.

4 | Hazard Risk Assessment

4.1 Dam Failure

4.1.1 Description

FEMA defines a dam as "any artificial barrier of at least a minimum size, including appurtenant works, that impounds or diverts water or liquid-borne solids on a temporary or long-term basis." Dam failure occurs when that impounded water is suddenly released in an uncontrollable manner. A dam/levee failure can result in the uncontrolled release of floodwaters downstream of a facility. Water released from the dam during failure will always flow downhill, and the resulting flood wave can cause significant damage to buildings and infrastructure downstream. The unexpected nature of the flood wave also increases the likelihood of loss of life in the impacted area due to reduced warning times.

Dams can fail for one or a combination of the following reasons:

- Overtopping caused by floods that exceed the capacity of the dam
- Structural failure of materials used in dam construction
- Movement and/or failure of the foundation supporting the dam
- Settle and cracking of concrete or embankment dams
- Inadequate maintenance and upkeep
- Deliberate acts of sabotage

According to Ohio Administrative Code Rule 1501:21-13-01 (2010), dams are classified as either Class I-IV dams based on the following criteria:

- Class I: Dams having a total storage volume greater than 5,000 acre-feet or a height of greater than 60 feet.
- Class II: Dams having a total storage volume greater than 500 acre-feet or a height of greater than 40 feet.
- Class III: Dams having a total storage volume greater than 50 acre-feet or a height of greater than 25 feet.
- Class IV: Dams having a total storage volume of 50 acre-feet or less and a height of 25 feet or less.

4.1.2 Location

Dam locations can be seen in **Figure 4.1.1**. Dam properties are also listed in **Table 4.1.1.**

Table 4.1.1: Dam Properties

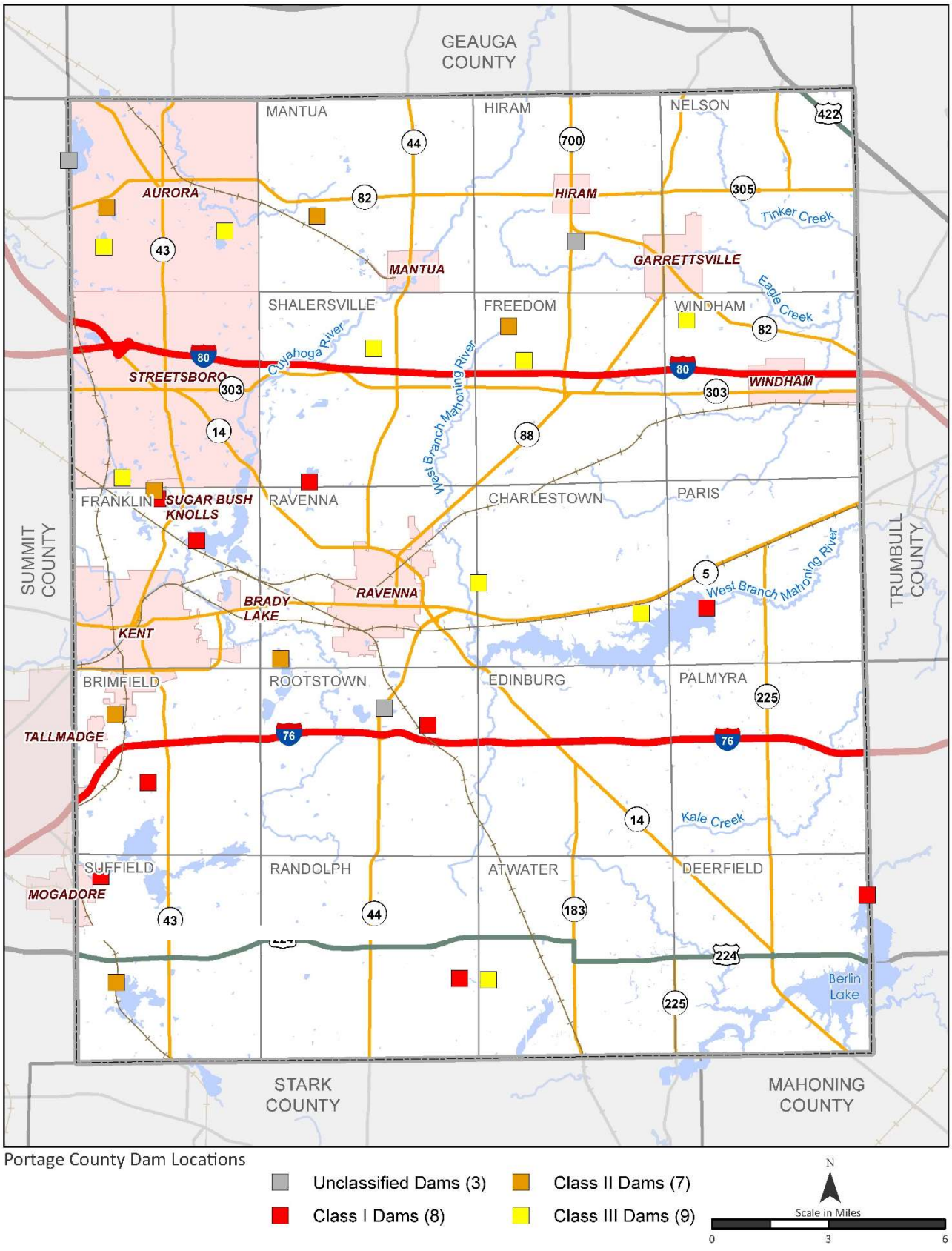
Class	Name	Owner	Impound-ment	Structure	Length (ft.)	Height (ft.)	Pool Acres	Storage (ac-ft.)	EAP (as of 11/2020)
I	Lake Rockwell Dam	City of Akron	Dam and Spillway	Earthfill	490	35	810	18,250	Y
I	Brimfield Lake Dam	Brimfield Lake, Inc.	Dam and Spillway	Earthfill	800	16	12.8	227	N
I	Mogadore Reservoir Dam	City of Akron	Dam and Spillway	Earthfill	640	36	1,401	21,000	Y

Class	Name	Owner	Impound-ment	Structure	Length (ft.)	Height (ft.)	Pool Acres	Storage (ac-ft.)	EAP (as of 11/2020)
I	Tucaway Lake Dam	John Pittman	Dam and Spillway	Earthfill	875	24.7	64	1,163	N
I	Hickory Hills Park Lake Dam	Multiple Owners	Dam and Spillway	Earthfill	450	12.3	15.7	121	N
I	Michael J. Kirwan Dam	COE, Pittsburgh District	Dam and Spillway	Earthfill	9,900	83	3,240	Null	N
I	Berlin Lake Dam	COE, Pittsburgh District	Dam and Spillway	Earthfill	5,750	96	1,850	Null	N
I	Whispering Pines Lake Dam*	Atwater Pines LLC	Dam and Spillway	Earthfill	--	13	--	34	N
II	Walden Lake Dam	The Walden Company LTD	Dam and Spillway	Earthfill	550	26.2	25.6	634	N
II	Lake Quincy Dam	Steve and Michelle Smith	Dam and Spillway	Earthfill	400	18.3	5.5	59	Y
II	Springwater Park Lake Dam	Shannon Adolph	Dam and Spillway	Earthfill	200	21.6	4.5	46	N
II	Wingfoot Lake Dam	ODNR, Division of Wildlife	Dam and Spillway	Other	400	14.2	460	3,429	N
II	Roundup Lake Dam	Wood Stone Mantua LLC	Dam and Spillway	Earthfill	860	12.4	32	188	Y
II	Lake Hodgson Dam	City of Ravenna	Dam and Spillway	Earthfill	215	24.8	190	2,517	Y
II	Miner Pond Dam	Bonner Farms Latitude	Dam and Spillway	Earthfill	685	23.6	5.4	45.1	N
III	Colebrook Lake No. 1 Dam	Scott and Tamara Thomason	Dam and Spillway	Earthfill	1,207	17.1	46	374	N

Class	Name	Owner	Impound-ment	Structure	Length (ft.)	Height (ft.)	Pool Acres	Storage (ac-ft.)	EAP (as of 11/2020)
III	Trail Lake Dam	Portage Park District	Dam and Spillway	Earthfill	200	11.9	31	183.1	Y
III	Sunny Lake Dam	City of Aurora Parks and Rec	Dam and Spillway	Earthfill	350	10.2	63	350	Y
III	Crawford Fitting Company Pound Dam	Shalersville RE Inv. LLC	Dam and Spillway	Earthfill	950	13.9	10	55	N
III	Burrows Lake Dam	Charles and Ruth Burrows	Dam and Spillway	Earthfill	950	14.8	13	87	N
III	Indian Canoe Lake Dam	Multiple Owners	Dam and Spillway	Earthfill	225	27.6	9.3	84.5	N
III	Schultz Lake Dam	David White	Dam and Spillway	Earthfill	245	15.2	11	78	N
III	Velek Pond Dam	Norma M. Copanic	Dam and Spillway	Earthfill	1,070	14.4	5	34.9	Y
III	Hickory Lake Dam	ODNR Division of Parks	Dam and Spillway	Earthfill	490	22.3	8.5	92.9	N

**Whispering Pines Lake Dam is a Class I Dam within Portage County, Ohio. This dam is not included in the Ohio Division of Natural Resources' (ODNR) list of dams within Portage County, Ohio. Data included in this table was provided by the National Inventory of Dams (NID).*

Figure 4.1.1: Dam Locations



4.1.3 Extent

As previously mentioned, Class I dams have a total storage volume greater than 5,000 acre-feet or a height of greater than 60 feet. Sudden failures of Class I dams would increase the probability that one of the following conditions would result:

- Loss of human life
- Structural collapse of at least one residence or one commercial or industrial business

Sudden failures of Class II dams would result in at least one of the following conditions:

- Disruption of a public water supply or wastewater treatment facility, release of health hazardous industrial or commercial waste, or other health hazards.
- Flooding of residential, commercial, industrial, or publicly owned structures. At the request of the dam owner, the chief may exempt dams from the criterion of this paragraph if the dam owner owns the potentially affected property.
- Flooding of high-value property. At the request of the dam owner, the chief may exempt dams from the criterion of this paragraph if the dam owner owns the potentially affected property.
- Damage or disruption to major roads including but not limited to interstate and state highways, and the only access to residential or other critical areas such as hospitals, nursing homes, or correction facilities as determined by the chief.
- Damage or disruption to railroads or public utilities.
- Damage to downstream class I, II, or II dams or levees, or other dams or levees of high value. Damage to dams or levees can include, but is not limited to, overtopping of the structure. At the request of the dam owner, the chief may exempt dams from the criterion of this paragraph if the dam owner owns the potentials affected property.

Sudden failures of Class III dams would result in at least one of the following conditions:

- Property losses including but not limited to rural buildings not otherwise described the Ohio Administrative Cod Rule 1501:21-12-01 (2010), and class IV dams and levees not otherwise listed as high-value properties in this rule. At the request of the dam owner, the chief may exempt dams from the criterion of this paragraph if the dam owner owns the potentially affected property.
- Damage or disruption to local roads including but not limited to roads not otherwise listed as major roads.

Sudden failures of Class IV dams would result in property losses restricted mainly to the dam and rural lands, and the loss of human life is not probable.

4.1.4 History

There are no reported dam failures in Portage County.

4.1.5 Probability

Dam failures are unlikely, but are never impossible. All dams, especially Class I dams, should have an emergency action plan (EAP) in place.

There are three dams in Portage County considered “high risk” dams, according to a 2019 Associated Press report:

Hickory Hills Park Lake Dam is a high hazard dam in poor condition and was not overdue its state inspection requirement as of 2018. Construction for this dam finished in 1958 and it was last inspected on April 21, 2016.

Lake Rockwell Dam is a high hazard dam in poor condition and was less than one year overdue its state inspection requirement as of 2018. Construction for this dam finished in 1913 and it was last inspected on May 16, 2013.

Brimfield Lake Dam is a high hazard dam in poor condition and was not overdue its state inspection requirement as of 2018. Construction for this dam finished in 1959 and it was last inspected on June 28, 2017.

4.1.6 Vulnerability Assessment

Infrastructure Impact

Failures of Class I and Class II dams could flood roadways, including major routes and local roads. Utility infrastructure (waste water, drinking water, and commercial and industrial waste lines) may be disrupted or destroyed.

Population Impact

The local population could be impacted by loss of utilities, including the local water supply. Health hazards may also be released into the flood waters during a dam failure which may cause indirect harm to the local population.

Property Damage

At least one residential or commercial property is likely to face structural collapse during a Class I dam failure. Class II dam failure has the potential to damage high value properties. Residential, commercial, and industrial properties may be damaged, as well as publicly owned properties. Properties that are owned by the dam owner may be exempt from the property damage calculation.

Loss of Life

Loss of life is likely during a Class I dam failure. Loss of life during a Class II or Class III dam failure is unlikely.

Economic Losses

Economic losses can include damages from flooding crops, damaged goods, and the flooding of vital roadways.

EAP's have been completed for some of the Class I and Class II dams; however, the data is subjected to agreements where it cannot be published publicly. The Ohio Department of Natural Resources holds record of these EAP's.

4.1.7 Land Use and Development Trends

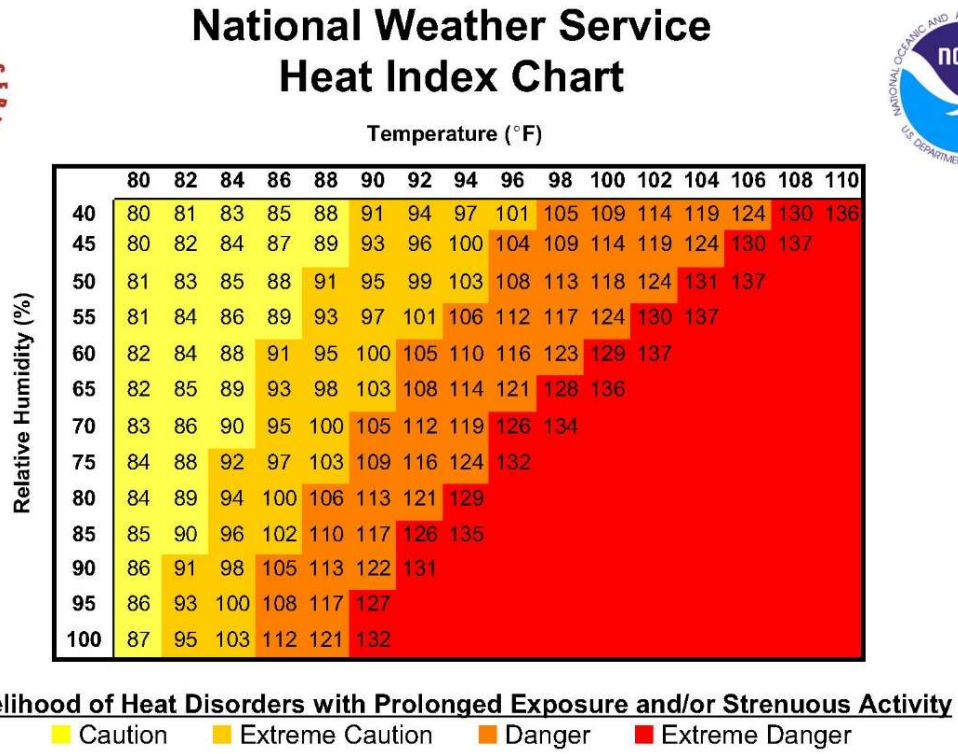
Development that has occurred in areas that will flood after a dam failure should be prepared for rapid flooding. Land use plans can limit development in these areas. To better understand where development should be limited, dam failure inundation maps should be completed for as many dams as possible.

4.2 Drought and Extreme Heat

4.2.1 Description

According to the states of New York, Washington, and California, temperatures that hover ten degrees or more above the average high temperature for the region and last for several days are considered extreme heat. Humid conditions, which add to the discomfort of high temperatures, occur when a high-pressure weather system traps hazy, moist air near the ground. Extreme heat may also contribute to the formation of a drought if moisture and precipitation are lacking. The National Weather Service's Heat Index Chart is provided in **Figure 4.2.1**.

Figure 4.2.1: Heat Index Chart (Source: National Weather Service)



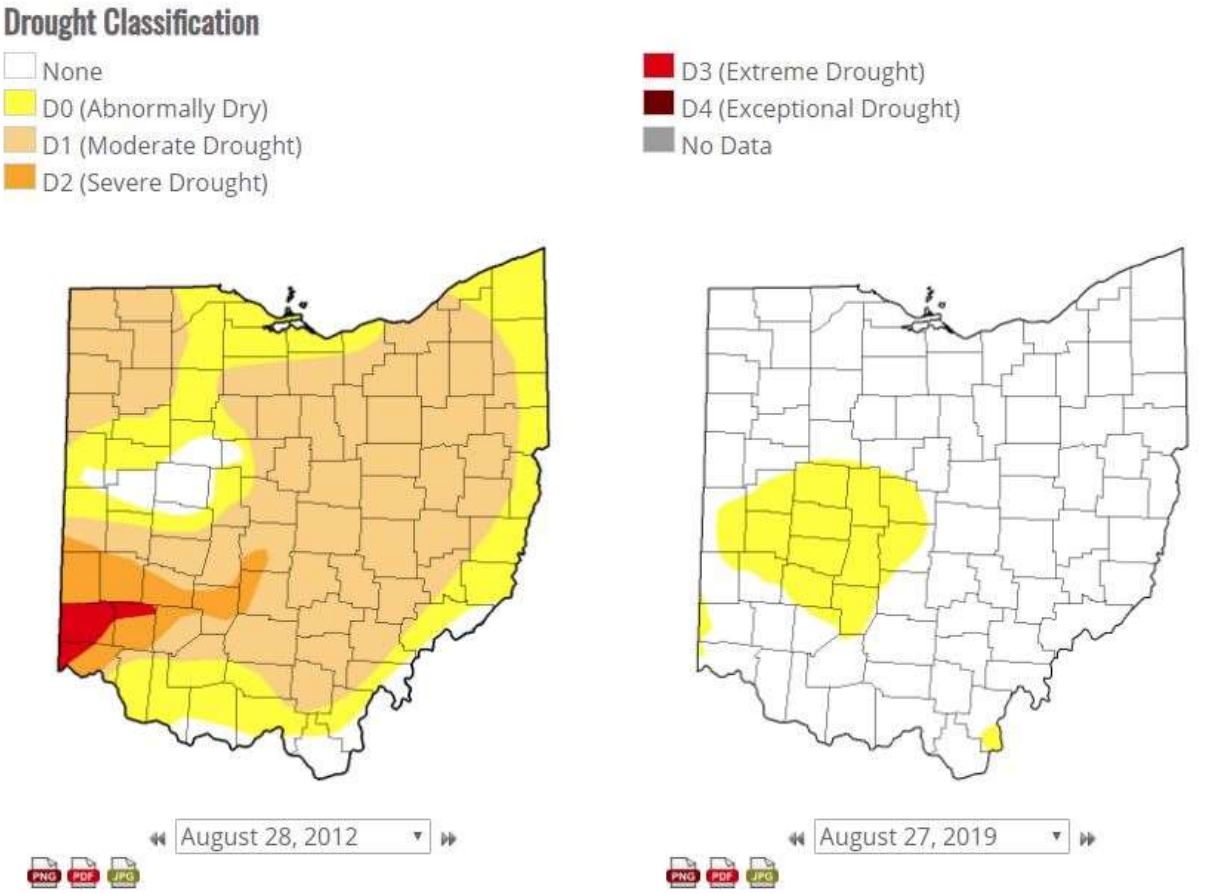
A drought is a shortage in atmospheric moisture or precipitation over an extended period of time. Droughts are common throughout all climatic zones and can range in length from a couple weeks to multiple years or decades in some areas. According to the National Oceanic and Atmospheric Administration (NOAA), there are three common types of drought: Meteorological, Agricultural, and Hydrological.

Meteorological drought severity is calculated by the amount of the rainfall deficit (compared to annual averages) and the length of the dry period. Agricultural drought is based on the effects to agriculture by factors such as rainfall and soil water deficits or diminished groundwater/reservoir levels needed for irrigation. Hydrological drought is based on the effects of rainfall shortages on the water supply, such as stream flow, reservoir and lake levels, and groundwater table decline.

4.2.2 Location

Drought and extreme heat is a countywide hazard that can affect all locations and jurisdictions in Portage County. More specifically, this hazard typically occurs at a regional scale. Droughts most commonly occur in Ohio from spring through autumn; however, they may occur at any time throughout the year. **Figure 4.2.2** depicts the Drought Monitor for the State of Ohio for August 28, 2012 compared with the Drought Monitor for August 27, 2019, as well as the associated statistics comparison for the percent area of the State of Ohio that were experience the associated drought conditions. The drought in the summer of 2012 was one of the worst on record for the State of Ohio and is described in more detail below.

Figure 4.2.2: Drought Monitor for the State of Ohio, 2012 and 2019



Statistics Comparison

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
2012-08-28	6.61	93.39	65.23	7.57	1.64	0.00	168
2019-08-27	86.74	13.26	0.00	0.00	0.00	0.00	13
Change	80.13	-80.13	-65.23	-7.57	-1.64	0.00	-155

**The Statistics Comparison above is calculated as a percent area in those drought conditions.*

4.2.3 Extent

Due to the widespread nature of extreme heat events, all structures, croplands, and infrastructure may experience impacts. More specifically, severe lack of moisture can cause soil – especially expansive soil - to recede from foundations of buildings, leading to structural instability. All residents of the County may also be impacted, especially at-risk populations that are more susceptible. The elderly and infants are the most vulnerable populations for extreme heat.

The most common symptoms caused by extreme heat, according to the Centers for Disease Control (CDC), include:

- **Heat Cramps** are muscle spasms, often in the abdomen, arms, or calves, caused by a large loss of salt and water in the body. Heat cramps can occur from prolonged exposure to extreme heat combined with dehydration, and they commonly happen while participating in strenuous outdoor activities such as physical labor or sports.
- **Heat Exhaustion** is a severe illness requiring emergency medical treatment. It can occur from exposure to extreme heat over an extended period of time (usually several days), especially when combined with dehydration.
- **Heat Stroke** is the most serious medical condition caused by extreme heat, requiring emergency treatment. Heat stroke (or hyperthermia) occurs when the body can no longer regulate its temperature and its temperature rises rapidly—up to 106°F or higher. It usually occurs as a progression from other heat-related illnesses, such as heat cramps or heat exhaustion; however, it can also strike suddenly without prior symptoms, and it can result in death without immediate medical attention.

Extreme heat is especially dangerous because people might not recognize their symptoms as signs of a more serious condition. For example, symptoms like sweating or fatigue may just appear to be normal reactions to a hot day. People may be in more danger if they experience symptoms that alter their decision-making, limit their ability to care for themselves, or make them more prone to accidents. If untreated, heat-related illnesses can worsen and eventually lead to death. Heat can also contribute to premature death from health impacts other than those listed above. This is because extreme heat can worsen chronic conditions such as cardiovascular disease, respiratory disease, and diabetes.

Due to the regional nature of droughts, effects may be noticed throughout the County in the urbanized and rural areas. All jurisdictions with the County may be affected in a single drought event. In Portage County, droughts are often linked to prolonged periods of above average temperatures and little to no precipitation.

Initial effects of drought can be noticed within a short period, as soils may dry out and plants may wither and die. When drought conditions persist over several weeks, months, or years, effects may be more pronounced with reductions in water levels of wells, lakes, reservoirs, streams, and rivers. Water supply issues for agriculture, commercial/industrial activities, and private consumption may arise if drought conditions persist over a long term. Droughts can have significant impacts on crop growth and harvest, which in turn may lead to reduced yield and a reduced economic return (see Vulnerability Assessment).

The extent of the drought is determined by the Palmer Drought Severity Index (PDSI). In this way, the Index can be utilized as a tool to help define disaster areas and indicate the availability of irrigation water supplies, reservoir levels, range conditions, amount of stock water, and potential for forest fires. The PDSI depicts prolonged (in months or years) abnormal dryness or wetness and is slow to respond, changing little from week to week. It also reflects long-term moisture runoff, recharge, and deep percolation, as well as evapotranspiration.

The PDSI is a standardized index with values typically falling between -4.00 and +4.00, although extreme conditions can be greater in value (**Table 4.2.1**). Negative values indicate drought conditions while positive values represent wet conditions. Values around zero represent near normal conditions.

Table 4.2.1: Palmer Drought Severity Index Classifications

Palmer Classifications	
4.0 or greater	Extremely Wet
3.0 to 3.99	Very Wet
2.0 to 2.99	Moderately Wet
1.0 to 1.99	Slightly Wet
0.5 to 0.99	Incipient Wet Spell
0.49 to -0.49	Near Normal
-0.5 to -0.99	Incipient Dry Spell
-1.0 to -1.99	Mild Drought
-2 to -2.99	Moderate Drought
-3.0 to -3.99	Severe Drought
-4.0 or less	Extreme Drought

4.2.4 History

According to the U.S. Drought Monitor, since 2000, the longest duration of drought in Ohio lasted 44 weeks beginning on July 23, 2002 and ending on May 20, 2003 (**Table 4.2.2**). Additionally, the most intense period of drought occurred the week of September 4, 2007.

Table 4.2.2: Consecutive Weeks of Drought in Portage County Since 2000 (Source USDM)

Start Date	End Date	Weeks
3/14/2000	4/4/2000	4
11/28/2000	12/5/2000	2
3/27/2001	4/3/2001	2
5/8/2001	5/29/2001	4
7/10/2001	10/23/2001	16
7/16/2002	11/19/2002	20
12/10/2002	5/20/2003	24
6/28/2005	7/26/2005	5
4/11/2006	5/16/2006	6
6/5/2007	8/14/2007	11
8/26/2008	9/30/2008	6
10/14/2008	11/18/2008	6
12/2/2008	1/27/2009	9
6/9/2009	6/23/2009	3
4/13/2010	6/1/2010	8
8/31/2010	11/23/2010	13

Start Date	End Date	Weeks
8/2/2011	8/30/2011	5
5/22/2012	10/23/2012	23
8/18/2015	1/5/2016	21
6/7/2016	10/18/2016	20
8/15/2017	11/14/2017	14
8/7/2018	9/4/2018	5
9/24/2019	11/5/2019	7
7/7/2020	9/1/2020	9

In Portage County, the National Climatic Data Center (NCDC) has record of one ongoing drought event from June 1999 to September 1999, which caused $4,000,000 in crop damages. The NCDC also has record of a second drought event in August of 1996. The drought during the summer of 1999 is described in more detail below.

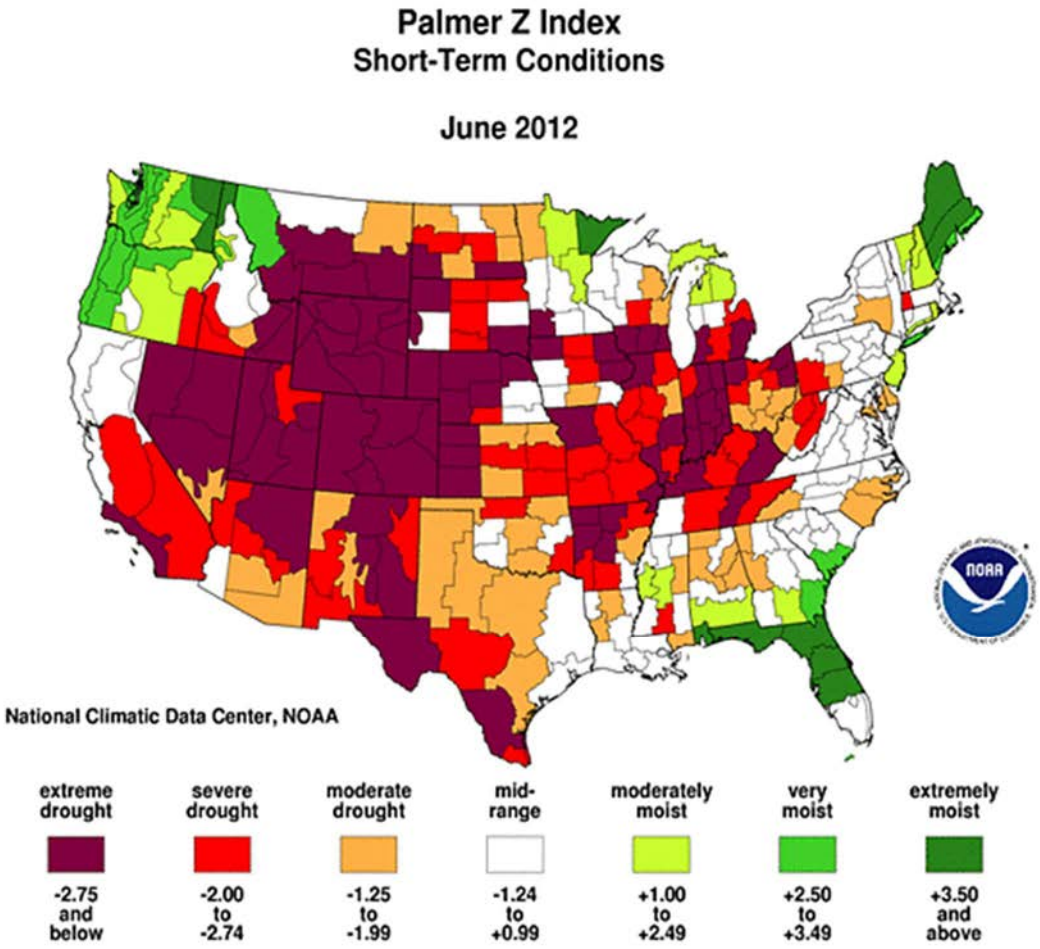
Drought, Summer 2012
The National Weather Service recorded the drought of Summer 2012 with the following description:

"The warm and dry spring of 2012 became the hot and dry summer of 2012. Temperatures in June and July were well above normal, with monthly temperatures in July averaging 4 to 5 degrees above normal. High temperatures reached 90 or above on dozens of days. The mercury topped 90 degrees 28 times at Cleveland and 32 times at Toledo. At Toledo, the temperature soared above 100 degrees 4 times! Other locations in northern Ohio and northwest Pennsylvania got close to 100 or exceeded 100 at least once or twice. There was little relief at night, with many nights seeing low temperatures barely dropping into the 70s, especially in July. The lack of rain compounded the summer stress. Rainfall was below normal in most areas from April through July. The combination of heat and drought left many farmers with parched soil. Rainfall in September and October was much above normal but was too little too late for many of the farmers."

Furthermore, by mid-June, Portage County was designated with moderate drought conditions. On July 30, 2012, the Governor of Ohio sent a memorandum to the USDA Ohio State Executive Director requesting primary county natural disaster designations for eligible counties due to agricultural losses caused by drought and additional disasters during the 2012 crop year. The USDA reviewed the Loss Assessment Reports and determined that there were sufficient production losses in 85 counties, including Portage County, to warrant a Secretarial disaster declaration. This declaration was issued on September 5, 2012.

Figure 4.2.3 displays the PDSI of June 2012 for the continental United States. This image shows that the region containing Portage County experienced extreme drought, with a Palmer Index of -2.75 or below, during the 2012 Drought. Further estimates of crop losses associated with this drought are located in **Table 4.2.2**.

Figure 4.2.3: Palmer Drought Severity Index for the United States in June of 2012



Drought, Summer 1999
The NCDC recorded the drought of summer 1999 with the following description:

Dry weather and little rain occurred during June, July, and August 1999. Drought conditions continued across most of northern Ohio during September, 1999. Widespread heavy rain occurred on September 29 but did little to help crop conditions. Losses from reduced crop yields are estimated at $200 million for northern Ohio alone.

Figure 4.2.3 displays the PDSI of June 2012 for the continental United States. This image shows that the region containing Portage County experienced extreme drought, with a Palmer Index of -2.75 or below, during the 2012 Drought.

4.2.5 Probability

Portage County has experienced droughts and excessive heat in the past and the potential exists for the County to experience droughts in the future. Seasons of drought and extreme heat have the potential to occur during any particular year when necessary conditions are met, and they are most likely to occur from spring through autumn.

Based on current climate reports:

- Drought projections suggest that some regions of the U.S. will become drier and that most will have more extreme variations in precipitation.
- Even if current drought patterns remained unchanged, warmer temperatures will amplify drought effects.
- Drought and warmer temperatures may increase risks of large-scale insect outbreaks and wildfires.
- Drought and warmer temperature may accelerate tree and shrub death, changing habitats and ecosystems in favor of drought-tolerant species.
- Forest-based products and values, such as timber, water, habitat and recreation opportunities, may be negatively impacted.
- Forest and rangeland managers can mitigate some of these impacts and build resiliency in forests through appropriate management actions.

4.2.6 Vulnerability Assessment

Infrastructure Impact

Droughts and extreme heat are unlikely to have direct impacts on infrastructure. Extreme droughts may cause damage to water systems.

Population Impact

Drought may impact the population by reducing locally grown crops. Extreme heat can cause heat stroke, heat cramps, and heat exhaustion, especially among vulnerable populations such as the very young and the elderly.

Property Damage

Droughts and extreme heat are unlikely to cause direct property damage.

Loss of Life

Loss of life is unlikely during droughts. Heat strokes may lead to dead if left untreated.

Economic Losses

Economic losses during droughts are likely to occur through loss of crops. **Table 4.2.3** compares crop outputs during a drought year with crop outputs during a non-drought year. During extreme heat events, economic activity may be halted.

Table 4.2.3: Commodity Loss between 2011 and 2012 (Source: USDA)

Commodity	Units	Non-Drought Year 2011 (acres)	Drought Year 2012 (acres)	Change	Change Amount
Soybeans, Planted	Acres	15,900	19,500	Up	3,600
Soybeans, Harvested	Acres	15,800	19,400	Up	3,600
Yield	%	99.37%	99.49%	Up	0.12%
Soybeans, production	Bushels	750,000	911,000	Up	161,000

Commodity	Units	Non-Drought Year 2011 (acres)	Drought Year 2012 (acres)	Change	Change Amount
Yield	Bushels/Acre Harvested	47.47	46.96	Down	-0.51
Corn for grain, planted	Acres	12,900	16,200	Up	3,300
Corn for grain, harvested	Acres	12,700	14,300	Up	1,600
Yield	%	98.45%	88.27%	Down	-10.18%
Corn, production	Bushels	1,750,000	1,974,000	Up	224,000
Yield	Bushels/Acre Harvested	137.80	138.04	Up	0.25
Winter Wheat, planted	Acres	4,100	1,700	Down	-2,400
Winter Wheat, harvested	Acres	3,900	1,360	Down	-2,540
Yield	%	95.12%	80.00%	Down	-15.12%
Winter Wheat, production	Bushels	196,000	84,100	Down	-111,900
Yield	Bushels/Acre Harvested	50.26	61.84	Up	11.58

4.2.7 Land Use and Development Trends

Drought is most likely to impact agriculture land uses. Extreme heat is most likely to impact land uses that house or serve vulnerable populations, such as schools, daycares, hospitals, and nursing homes.

4.3 Earthquake

4.3.1 Description

Earthquakes are a result of a sudden movement of the Earth's crust and are caused by the abrupt rupture and rebound of accumulated stress along geologic faults. These movements vary in length and may last from a few seconds to several minutes.

The seismicity, or seismic activity, of an area refers to the frequency, type, and size of earthquakes experienced over a period of time. Earthquakes are measured using observations from seismometers. The Moment Magnitude Scale (MMS), which was developed in the 1970s, is the most common scale on which earthquakes larger than approximately 5.0 in magnitude are reported for the entire world. Earthquakes smaller than magnitude 5.0, which are more numerous, are reported by national seismological observatories and measured most commonly on the local magnitude scale – also referred to as the Richter Scale. These two scales are numerically similar over their range of validity. Earthquakes of magnitude 3.0 or lower are often almost imperceptible or weak, while earthquakes of magnitude 7.0 or greater can potentially cause serious damage over larger areas.

Damage from an earthquake also depends on the earthquake's depth in the Earth's crust. The shallower an earthquake's epicenter, the more damage to structures it will cause. Alternatively, an earthquake can also be measured by its intensity. The Modified Mercalli Intensity Scale (MMI) ranges in value I to XII, in roman numerals (**Table 4.3.1**).

Major earthquakes are low probability, high consequence events. Most major earthquakes in the U.S. have occurred in California and other western states. There have been recorded earthquakes throughout the U.S., and the Ohio River Valley has experienced earthquakes exceeding the 3.0 magnitude within the last 25 years.

4.3.2 Location

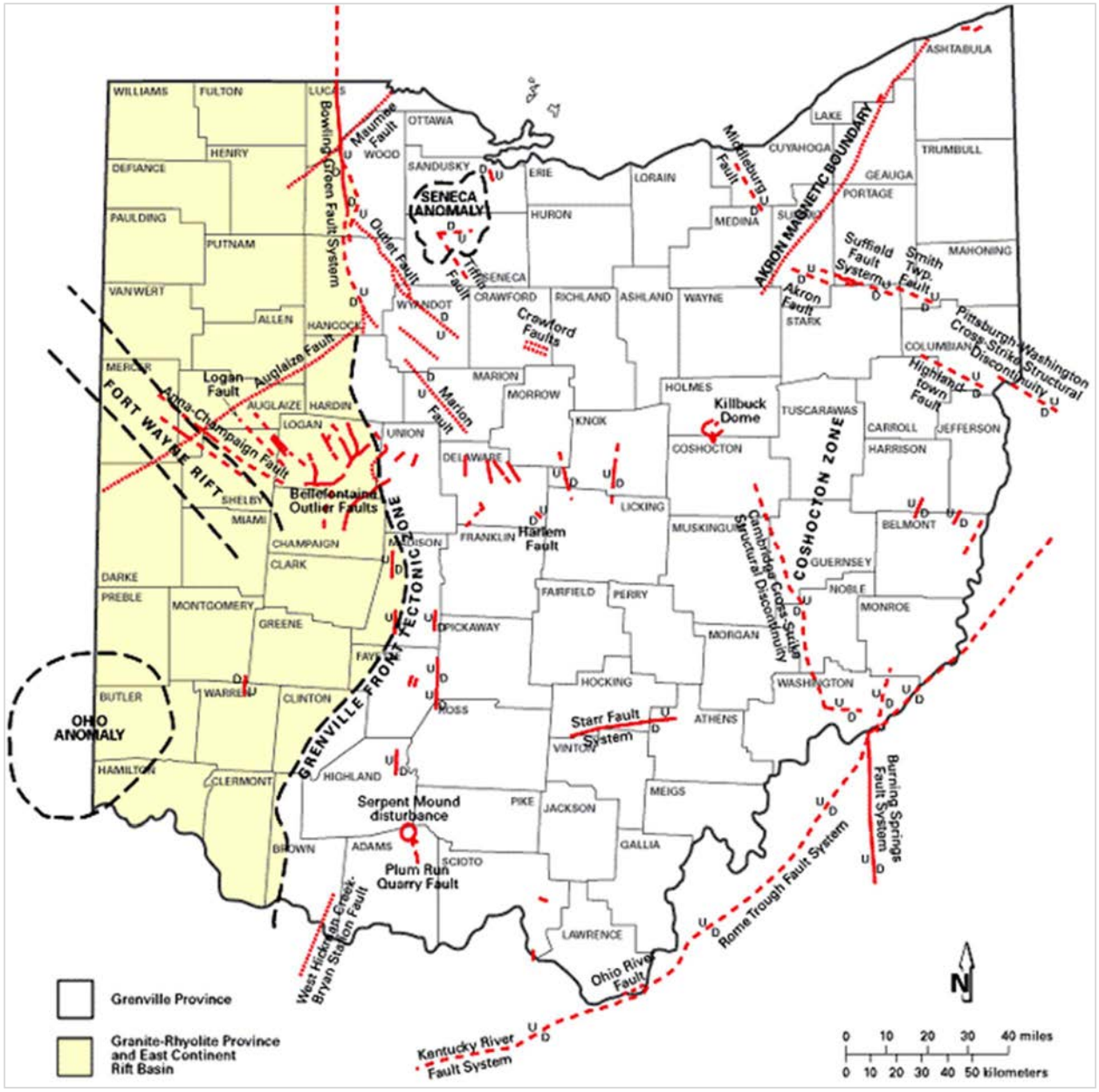
Earthquakes are countywide hazards and can affect all areas and jurisdictions within Portage County. According to the Ohio Department of Natural Resources, Ohio is located on the periphery of the New Madrid Seismic Zone, an area in and around Missouri that was the site of the largest earthquake sequence to occur in the Country. Additionally, west central Ohio is the area of Ohio with the highest risk for earthquakes in the State.

Figure 4.3.1 shows the location of deep structures throughout Ohio. Portage County contains the Suffield Fault System, which runs through the southwest corner of the County.

Table 4.3.1: Modified Mercalli Intensity Scale (Source: Ohio Department of Natural Resources)

Modified Mercalli Intensity Scale		Magnitude
I	Detected only by sensitive instruments.	1.5
II	Felt by few persons at rest, especially on upper floors; delicately suspended objects may swing.	2
III	Felt noticeably indoors, but not always recognized as earthquake; standing autos rock slightly, vibrations like passing truck.	2.5
IV	Felt indoors by many, outdoors by few, at night some awaken; dishes, windows, doors disturbed; standing autos rock noticeably.	3
V	Felt by most people; some breakage of dishes, windows, and plaster; disturbance of tall objects.	3.5
VI	Felt by all, many frightened and run outdoors; falling plaster and chimneys, damage small.	4
VII	Everybody runs outdoors; damage to buildings varies depending on quality of construction; noticed by drivers of autos.	4.5
VIII	Panel walls thrown out of frames; walls, monuments, chimneys fall; sand and mud ejected; drivers of autos disturbed.	5
IX	Buildings shifted off foundations, cracked, thrown out of plumb; ground cracked; underground pipes broken.	5.5
X	Most masonry and frame structures destroyed; ground cracked, rails bent, landslides.	6
XI	Few structures remain standing; bridges destroyed, fissures in ground, pipes broken, landslides, rails bent.	6.5
XII	Damage total; waves seen on ground surface, lines of sight and level distorted, objects thrown up into air.	7 7.5 8

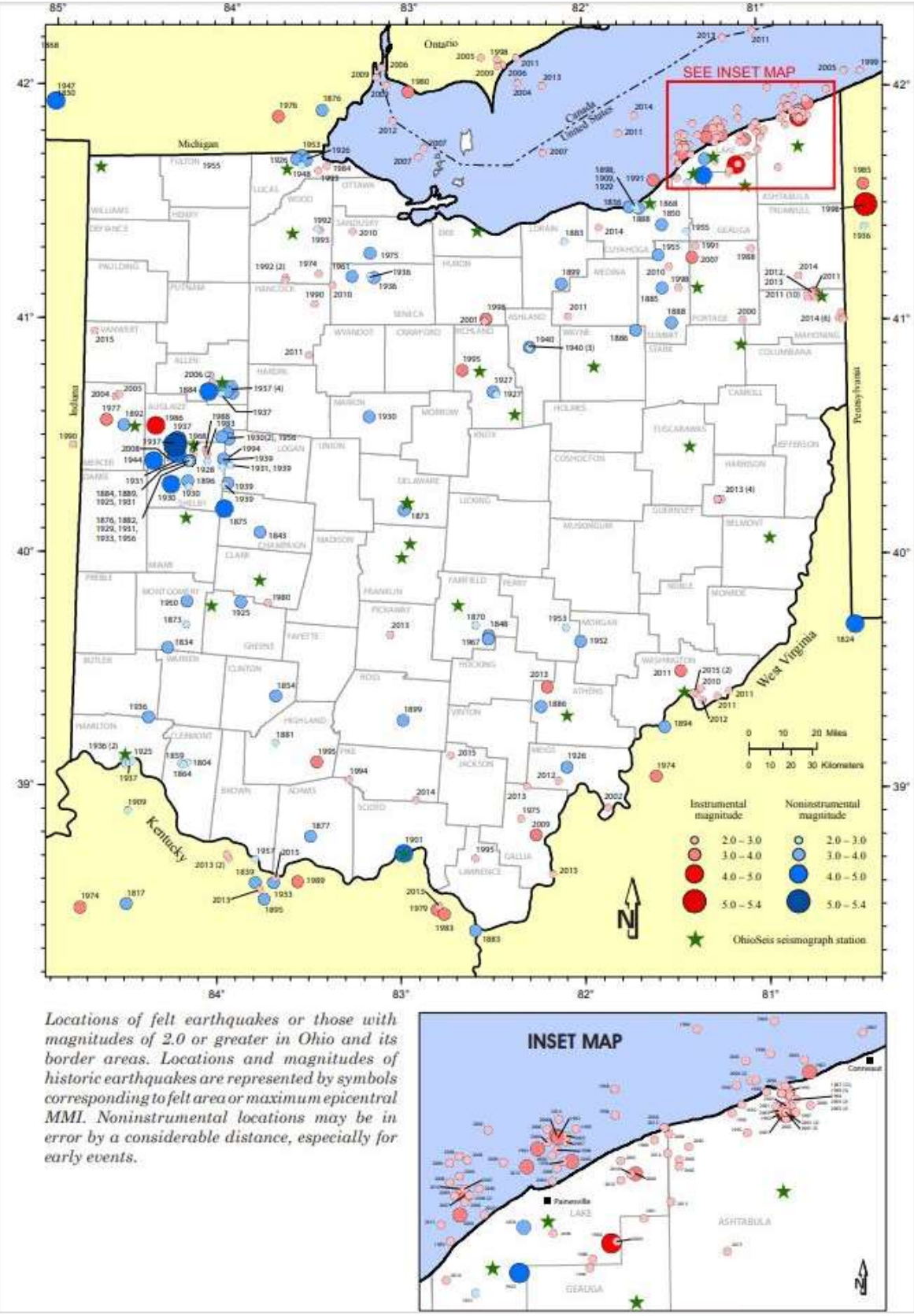
Figure 4.3.1 Map of Deep Structures in Ohio (Source: ODNR)



4.3.3 Extent

Earthquakes post a risk to life and property, depending on the severity. To monitor earthquakes, the State of Ohio has deployed several seismometers to record ground-shaking activity (**Figure 4.3.2**). There is a seismometer located in Portage County.

Figure 4.3.2: Earthquake Epicenters and Seismometers in Ohio (Source: ODNR)



Locations of felt earthquakes or those with magnitudes of 2.0 or greater in Ohio and its border areas. Locations and magnitudes of historic earthquakes are represented by symbols corresponding to felt area or maximum epicentral MMI. Noninstrumental locations may be in error by a considerable distance, especially for early events.

Earthquakes can yield a variety of different outcomes. With the ground shaking associated with earthquake events, buildings have the potential to be impacted. If soil liquefaction, or the mixing of sand and soil with groundwater, occurs, buildings can sink into the ground. Earthquakes also have the potential to rupture dams or levees along a river, resulting in flooding (see Dam Failure section). Earthquakes can cause landslides in high-risk areas and can cause mines to subside. Furthermore, earthquakes that break gas and power lines can result in fires.

4.3.4 History

The State of Ohio has experienced more than 120 earthquakes between 1776 and 2019. Fourteen of these earthquakes have caused minor to moderate damage. The largest historic earthquake in Ohio was centered in Shelby County in 1937. This event was estimated to have had a magnitude of 5.4 on the Richter scale. **Figure 4.3.2**, above, displays epicenters of all historical earthquakes with a magnitude greater than 2.0, as well as the location of seismometers in the State of Ohio.

The ODNR maintains a record of all earthquake events in the State of Ohio. There have been five minor earthquakes in Portage County, none of which caused damages or injuries. These five events are listed in **Table 4.3.2** below. The events greater than magnitude 2.0 are also depicted on **Figure 4.3.2** on the previous page.

Table 4.3.2: Portage County Earthquake Events (Source: ODNR)

Month/Year	Location	Depth (km)	Magnitude	Modified Mercalli Intensity (If available)
11/1987	Mantua Township	2	1.3	N/A (Not Felt)
3/1988	Nelson Township	0	2.8	N/A (Not Felt)
3/1991	Urban Township	0	2.3	N/A (Not Felt_
8/2000	Atwater Township	10	3.0	IV
3/2007	City of Aurora	5	3.3	VI

4.3.5 Probability

The USGS has both long-term and short-term probabilistic seismic hazard forecasts. In the 2018 one-year probabilistic seismic hazard forecast, the United States Geological Survey estimates that there is a less than one percent chance of potentially minor-damage ground shaking in 2018 for Portage County (**Figure 4.3.3**).

The USGS also determined the long-term hazard of earthquakes for the United States (**Figure 4.3.4**). The measurement used in this estimation is based on the chance of ground shaking – peak ground acceleration – as a percentage of the natural force of gravity over time. This map identifies that most of Portage County and surrounding areas in Ohio have the second to lowest hazard ranking for the nation.

Furthermore, the ODNR indicates that the brief historic record of Ohio earthquakes suggests a risk of moderately damaging earthquakes in the western, northeastern, and southeastern parts of the State.

Figure 4.3.3: Chance of Potentially Minor-Damage Ground Shaking in 2018 (Source: USGS)

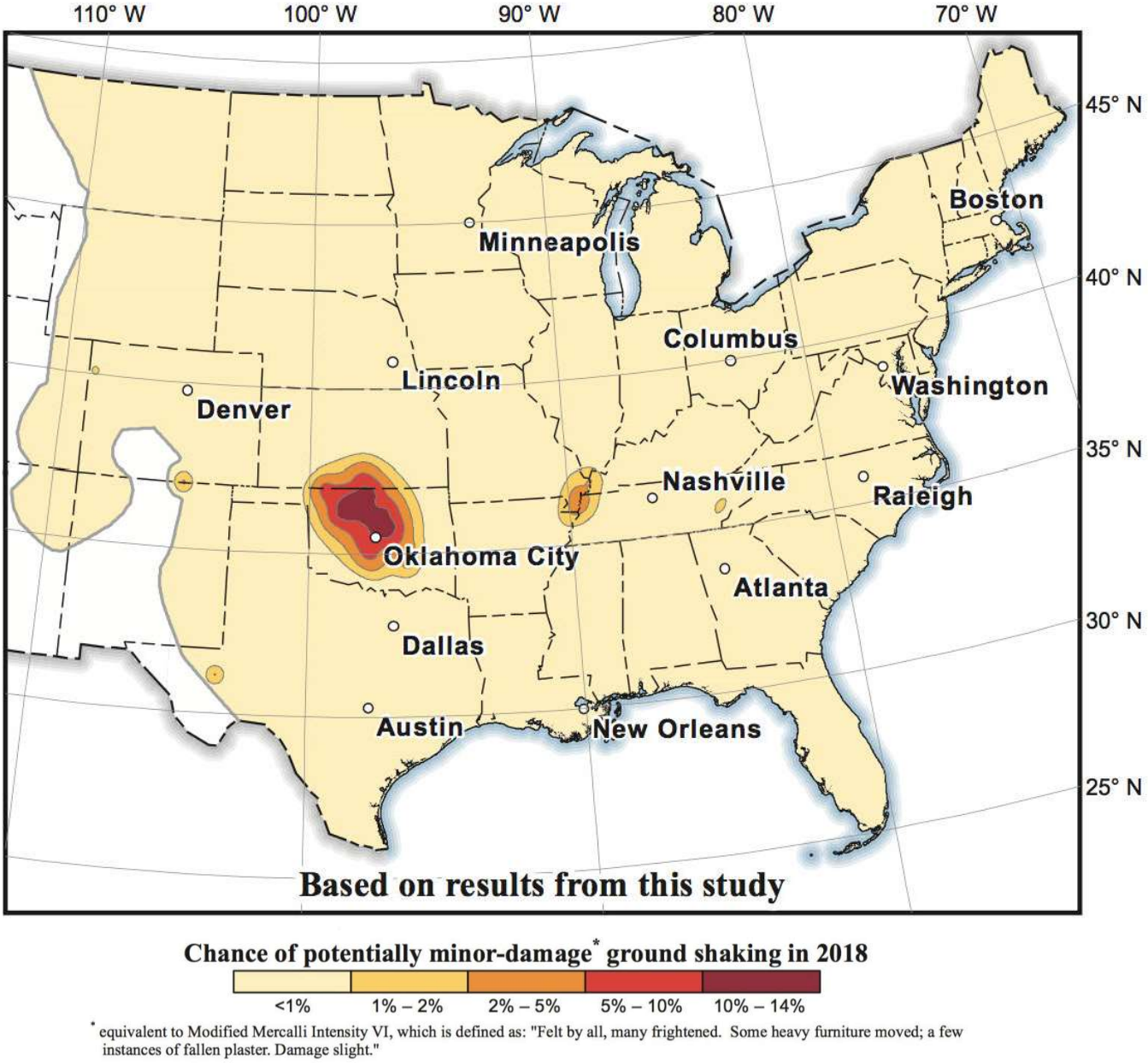
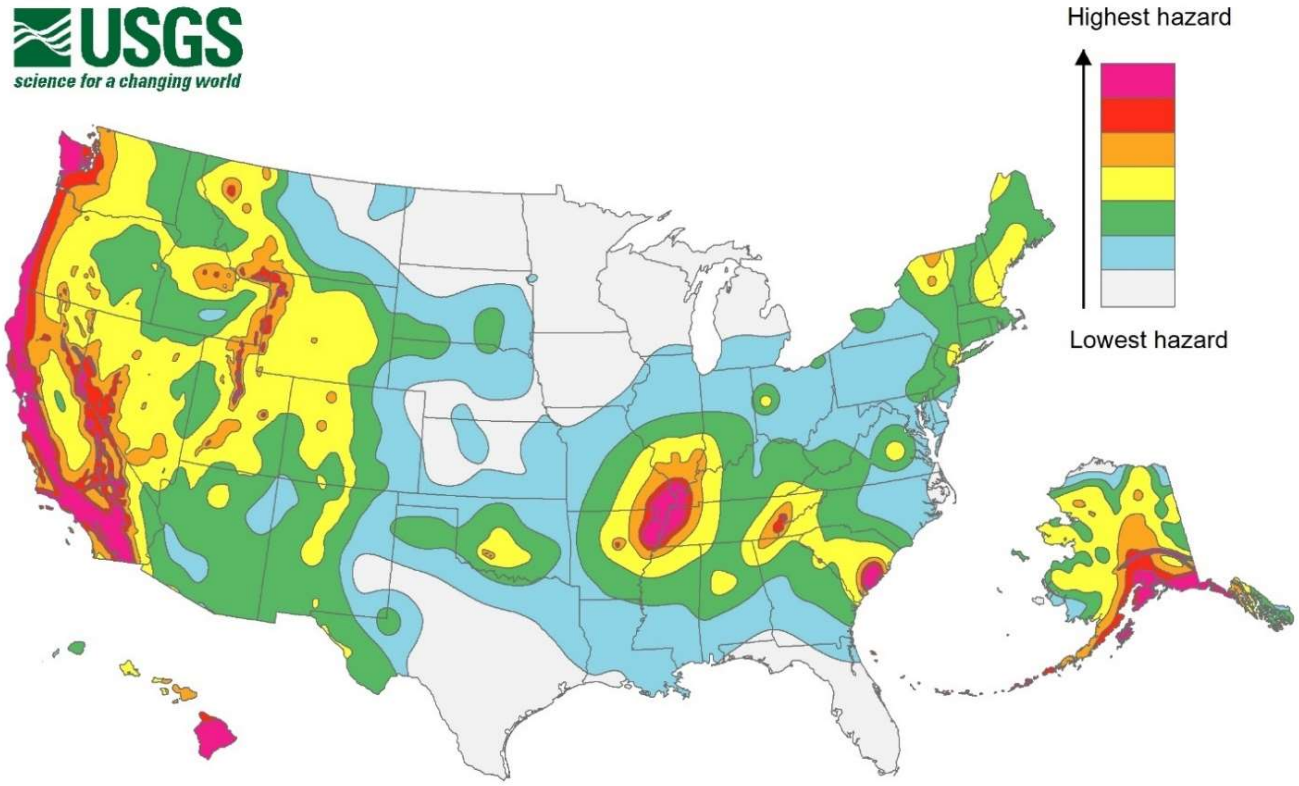


Figure 4.3.4: Probability of Earthquakes in the United States (Source: USGS)



4.3.6 Vulnerability Assessment

Infrastructure Impact

Since there are no major historical earthquakes in the County's history, exact damages to infrastructure are unknown. Buildings, roadways, and gas and power lines have the potential to be affected. Since the probability of an earthquake occurring in Portage County is less than one percent, there is a low risk of impact to infrastructure as a result.

Population Impact

There is a low risk of earthquakes occurring in Portage County. Accordingly, there is low risk of impact to the population. If an earthquake would occur within the County, the population could be impacted by loss of homes, as well as potential loss of utilities.

Property Damage

With any earthquake event, there is potential for property damage to occur, as ground shaking can lead to damaged buildings. Due to the non-site-specific nature of this hazard, **Table 4.3.3** lists all structures within Portage County as having potential impacts from earthquakes. It also provides values for two worst-case scenarios valued at one percent damage and five percent damage.

Loss of Life

Portage County has no recorded earthquake events that have resulted in loss of life; however, in the event that an earthquake occurs, there is potential for loss of life. Loss of life can be mitigated by

educating the public on proper protection in the event of an earthquake. For example, the Ready Campaign (Ready.gov) is a national public service campaign designed to educate and empower the American people to prepare for, respond to, and mitigate disasters. The Ready Campaign provides materials for how to educate the public on earthquake preparedness.

Economic Losses

Earthquakes have the potential to damage infrastructure, resulting in economic burden of clean up and repairs. Potential economic losses and damages associated with Portage County structures and potential worst-case scenarios are recorded in **Table 4.3.3**, below. Compared with other hazards, earthquakes are relatively unlikely to occur, meaning there is low risk of economic loss as a result of an earthquake.

Table 4.3.3: Structure Vulnerability from Earthquakes

Structure Type	Number of Properties Exposed	Total Value of Structures	Damage for 1% Scenario	Damage for 5% Scenario
Residential	80,297	$2,677,260,670	$26,772,607	$133,863,034
Non-Residential	19,542	$2,965,010,620	$29,650,106	$148,250,531
Critical Facilities	*3,459*	$1,917,178,810	$19,171,788	$95,858,941
Total	99,839	$5,642,271,290	$56,422,713	$282,113,565

4.3.7 Land Use and Development Trends

While incidence and likelihood of earthquakes is low in Portage County, all communities are at risk. As such, all new developments should be built up to code to reduce risk, prevent building destruction, and preserve life during any potential earthquake event.

4.4 Epidemic

4.4.1 Description

The Centers for Disease Control and Prevention (CDC) defines an epidemic as "an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area." Merriam-Webster's defines a pandemic as "an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population."

Epidemics occur when an agent and susceptible hosts are present in adequate numbers, and the agent can be effectively conveyed from a source to the susceptible hosts. More specifically, an epidemic may result from any of the following:

- A recent increase in amount or virulence of the agent,
- The recent introduction of the agent into a setting where it has not been before,
- An enhanced mode of transmission so that more susceptible persons are exposed,
- A change in the susceptibility of the host response to the agent, and/or
- Factors that increase host exposure or involve introduction through new portals of entry.

While epidemics usually refer to infectious agents, the Centers for Disease Control and Prevention notes that non-infectious diseases such as diabetes and obesity exist in epidemic proportion in the United States. A pandemic is an epidemic that has spread across multiple regions or countries. For the purposes of this report, only epidemics referring to infectious agents will be discussed.

4.4.2 Location

Epidemics can develop with little or no warning and quickly erode the capacity of local medical care providers. A fast-developing epidemic can last several days and extend into weeks or even months in extreme cases. Epidemics can occur at any time of the year, but the warm summer months, when bacteria and microorganism growth are at their highest, present the greatest risk for epidemics to occur. An epidemic has the potential to affect the entire County but is more probable to occur in densely populated areas, especially at facilities with large numbers of occupants.

4.4.3 Extent

The most likely epidemics that could affect Portage County include flu (bird flu, H1N1 virus) and West Nile Virus. The Coronavirus (COVID-19) impacted the County, along with the rest of the United States, in 2020 during the creation of this plan and is an ongoing emergency. Such an event has the potential to cause serious injury or death to large numbers of people. Epidemics are unlikely to cause property damage. The impact on individuals could also be economic due to the inability of an infected person to go to work. Economic impacts also occur during quarantines, either imposed by the government or self-imposed. In a worst-case scenario, cascading effects could lead to civil unrest, food and fuel shortages, or utility failure due to large numbers of people unable to provide services.

4.4.4 History

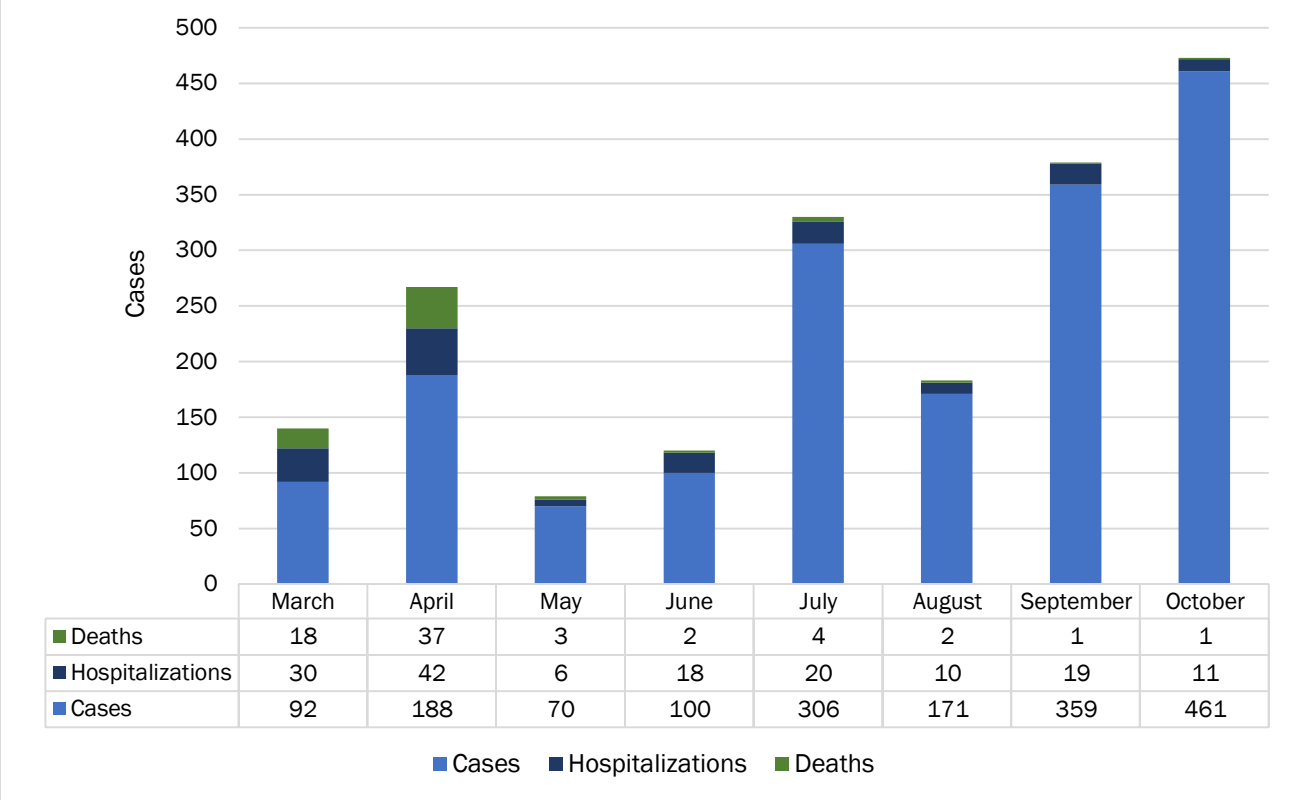
The Novel Coronavirus (COVID-19) impacted the County, along with the rest of the United States, in the winter of 2020 and continues to persist in number of cases, hospitalizations, and deaths (through October 2020). The pandemic is an ongoing national emergency, and a National Emergency Declaration went into effect on March 13, 2020. Governor Mike DeWine and Ohio Department of Health Directory Dr. Amy Acton issued a stay-at-home order on March 23, 2020 with an expiration date of April 6, 2020. On April 2, 2020, Governor DeWine and Dr. Acton extended the stay-at-home order until May 1, 2020.

The stay-at-home order included the following components:

- Any person entering Ohio from out of state is asked to self-quarantine for 14 days.
- The number of people allowed to be inside essential establishments is restricted.
- A board has been established to assist local health departments identify essential businesses.
- Weddings are permitted, although receptions are expected to follow social distancing guidelines (at least six feet apart).
- Campgrounds are closed, except when a camper or recreational vehicle serves as a permanent residence.
- Ohio State Parks remain open, but the parks director can take action to enforce the orders that have been issued.

In early May 2020, businesses and other organizations in Ohio started the process of reopening; however, by mid-to-late June hospitals begin to see an uptick in the number of COVID-19 hospitalizations. In fall of 2020, as the school year began, local schools utilized a combination of in-person and virtual education. As of October 28, 2020, Portage County had 1,747 total cases, 156 hospitalizations, and 68 deaths related to COVID-19 (Source: ODH). **Figure 4.4.1**, below, displays total COVID-19 case count, as well as hospitalizations and deaths, in Portage County by month. Please note that October only includes October 1-28, 2020.

Figure 4.4.1: Portage County COVID-19 Cases by Month



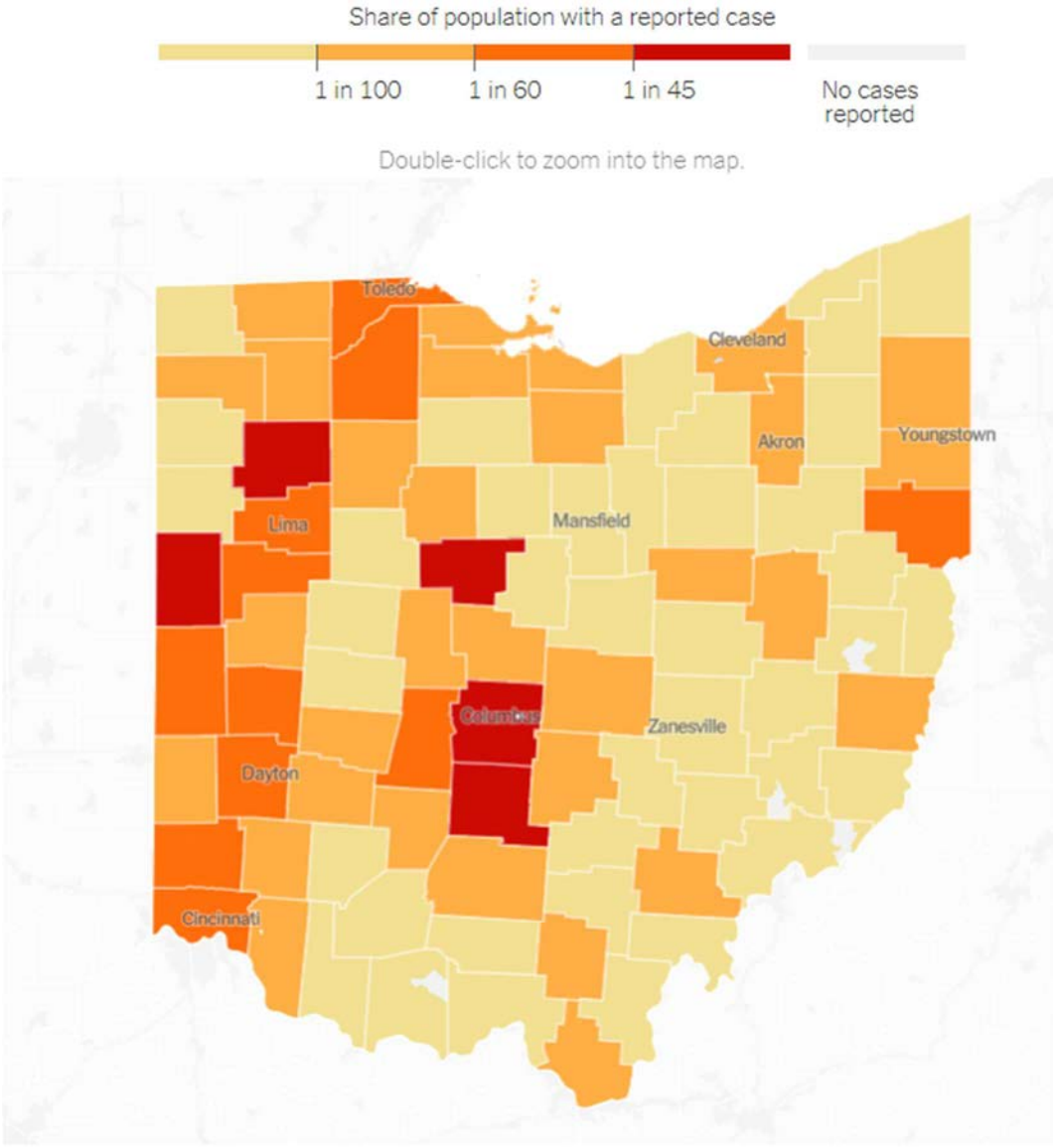
	March	April	May	June	July	August	September	October
Deaths	18	37	3	2	4	2	1	1
Hospitalizations	30	42	6	18	20	10	19	11
Cases	92	188	70	100	306	171	359	461

Source: ODH

Figure 4.4.2 compares COVID-19 rates per capita in Ohio's counties as of October 15, 2020. This figure, which was provided by The New York Times, was developed using data from state and local health agencies. According to this figure, Portage County has a per capita COVID-19 rate of less than

1 in 100 residents. Counties in red on the figure have per capita COVID-19 rate of more than 1 in 44 residents.

Figure 4.4.2: COVID-19 Cases Per Capita by County as of October 15, 2020



Sources: State and local health agencies and hospitals. Population and demographic data from Census Bureau.

The Ohio Department of Health (ODH) maintains a Public Health Advisory Alert System. This is "a color-coded system designed to supplement existing statewide orders through a data-driven framework to assess the degree of the virus' spread and to engage and empower individuals, businesses, communities, local governments, and others in their response and actions" (Source: ODH). The system consists of four levels that provide Ohioans with guidance as to the severity of the problem in the counties in which they live. The levels are determined by seven data indicators that identify the risk level for each county and a corresponding color code to represent that risk level. These colors and risks are described in **Table 4.4.1**.

Table 4.4.1: Public Health Advisory Alert System

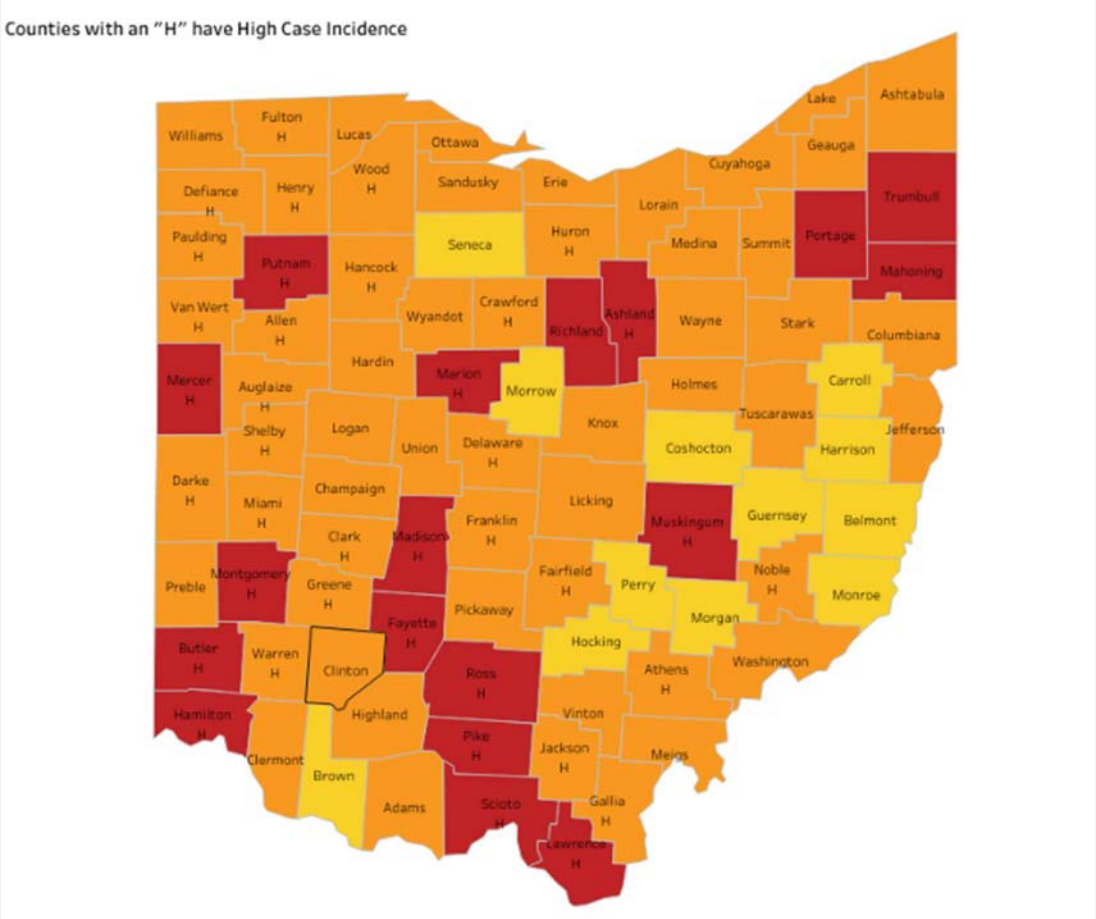
Color	Public Emergency Level	Risk Information
Yellow	Level 1 Public Emergency	Active exposure and spread.
Orange	Level 2 Public Emergency	Increased exposure and spread. Exercise high degree of caution.
Red	Level 3 Public Emergency	Very high exposure and spread. Limit activities as much as possible.
Purple	Level 4 Public Emergency	Severe exposure and spread. Only leave home for supplies and services.

Source: ODH

Figure 4.4.3 shows the Public Health Advisory System as of October 15, 2020. This image shows that Portage County had a Level 3 Public Emergency (orange) as of October 15, 2020.

The exact long-term impacts from COVID-19 are unknown at this point.

Figure 4.4.3: Public Health Advisory System as of October 15, 2020



Source: ODH

4.4.5 Probability

Epidemics can appear without warning. Portage County should be prepared to handle small- and large-scale outbreaks.

4.4.6 Vulnerability Assessment

It is difficult, if not impossible, to predict impacts of future epidemics. The following assessment provides general information on potential impacts.

Infrastructure Impact
There is likely to be little to no impact to infrastructure in the event of a small-scale epidemic. Large-scale epidemics may cause indirect damage to utility systems and road networks if employees cannot perform maintenance.

Population Impact
The population of Portage County is likely to be significantly impacted, should an epidemic occur.

Property Damage
Property damage is not likely to occur as a direct result of an epidemic event.

Loss of Life
Loss of life is a potential outcome from any epidemic event.

Economic Losses
Economic losses would likely be observed through the inability for individuals to work. Large-scale epidemics then can disrupt the flow of the economy.

4.4.7 Land Use and Development Trends

Adequate health care facilities should be maintained in the event of an epidemic. Intensive care beds, morgues, and quarantine facilities should be in sufficient supply before an event occurs.

4.5 Flooding

4.5.1 Description

FEMA describes a flood as "a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters [and] the unusual and rapid accumulation or runoff of surface waters from any source." Floods in Portage County are typically riverine floods. Flash floods are floods that occur quickly, even occurring without visible signs of precipitation.

Riverine Flooding

Riverine flooding typically occurs when rivers or streams overflow onto nearby floodplains. Riverine floods are the most common flood types in the United States.

Common riverine flood-related terms include:

- **100-Year Flood:** A flood that has a one percent chance to occur each year. The 100-year floodplain can be seen in **Figure 4.5.1: Flood Hazard Map**. The elevation of the water from the 100-year flood is called the Base Flood. Mitigation strategies should be based on the base flood elevation.
- **Floodplain:** An area that has the potential to flood from any source.
- **Floodway:** Sometimes referred to as a regulatory floodway. FEMA defines a floodway as "the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood without cumulatively increasing the water surface elevation more than a designated height."

Flash Flooding

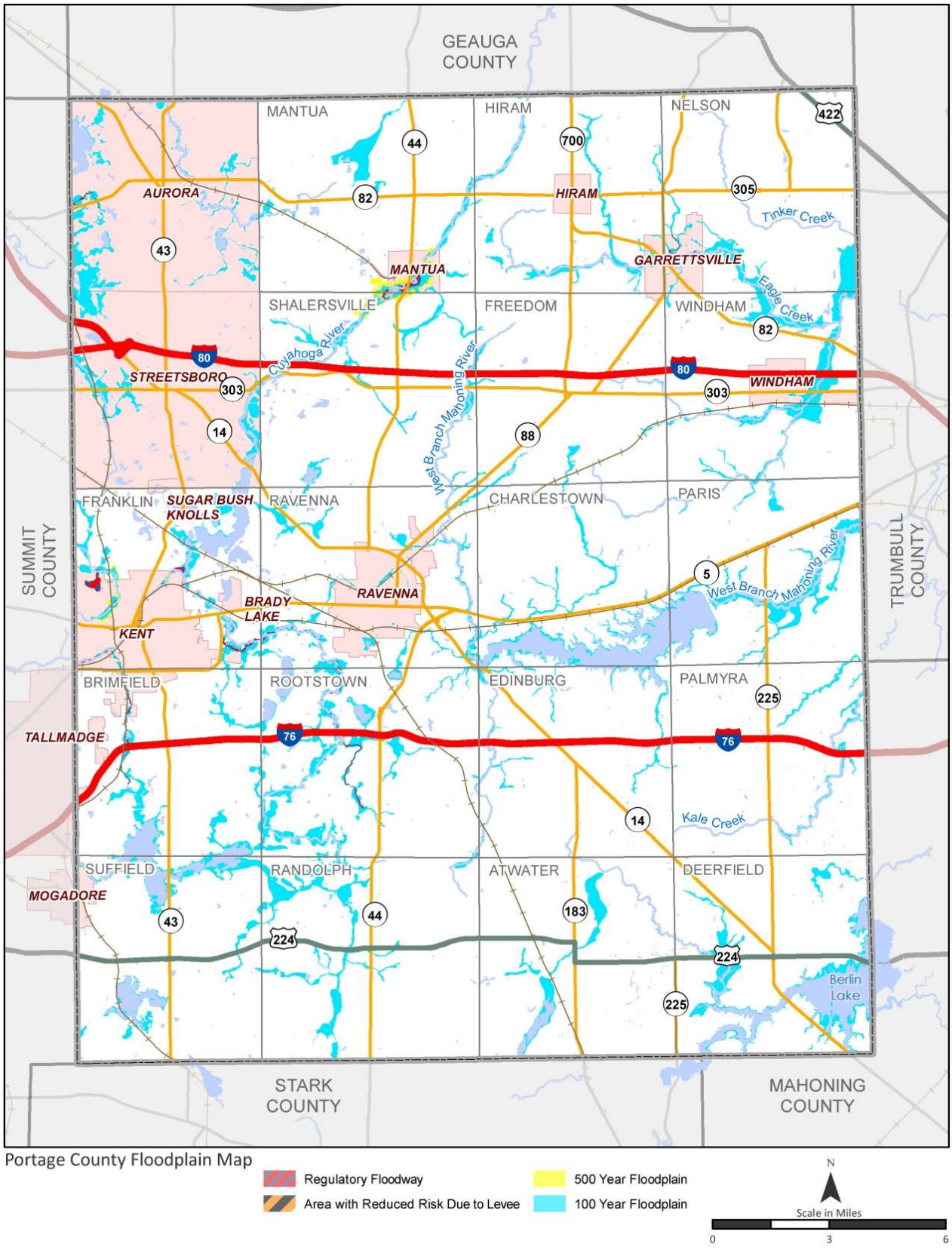
Flash floods are typically caused by heavy rainfall over a short period of time. These floods are particularly dangerous because they can occur in minutes and can sometimes occur even without rainfall, such as when an ice jam breaks or dissolves. Areas impacted by wildfires are particularly susceptible to flash floods.

Urban flooding is a type of flash flood that can occur in areas of development that have a high level of impervious surfaces, such as concrete. The level of development and the level of stormwater management practices impact the severity of urban flooding.

4.5.2 Location

Riverine flooding is most likely to occur in the 100-year floodplain. Flash flooding is more likely to occur in developed areas. **Figure 4.5.1** shows the location of the 100-year floodplain.

Figure 4.5.1: 100-Year Flood Zone



4.5.3 Extent

Portage County currently has 80 flood insurance maps (see **Appendix F**). The most recent update is from March 2017, although some maps have need been updated since August 2009. **Table 4.5.1** summarizes the NFIP participation for Portage County and its communities.

Table 4.5.1: NFIP Status for Portage County Communities

Community	Participation Status	Comments
Portage County	Participates	
City of Aurora	Participates	
City of Kent	Participates	
City of Ravenna	Participates	
City of Streetsboro	Participates	
City of Tallmadge	Participates	Listed under Summit County in FEMA Community Status Book Report
Village of Garrettsville	Participates	
Village of Hiram	Does not participate	Area of Minimal Flood Hazard*
Village of Mantua	Participates	
Village of Mogadore	Participates	
Village of Sugar Bush Knolls	Does not participate	Area of Minimal Flood Hazard*
Village of Windham	Does not participate	Has areas in 100-year flood zone; see Chapter 5 for associated mitigation action.

**Area of minimal flood hazard status provided by FEMA's National Flood Hazard Layer Viewer.*

Table 4.5.2 shows the repetitive loss properties in Portage County, Ohio. FEMA defines a repetitive loss property as an insurable building for which two or more claims of more than $1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. FEMA defines a severe repetitive loss property as a single family property that is covered under flood insurance by the NFIP and has incurred flood-related damage for which four or more separate claims payments have been paid under flood insurance coverage, with the amount of each claim payment exceeding $5,000 and with cumulative amount of such claims payments exceeding $20,000; or for which at least two separate claims payments have been made with the cumulative amount of such claims exceeding the reported value of the property. The County has no severe repetitive loss properties.

Table 4.5.2: Repetitive Loss Properties

Community Name	Zone	Property Type	Building Payment	Contents Payment	Losses	Total Paid
City of Aurora	EMG	Residential	$965	$3,405	2	$4,369
City of Aurora	EMG	Residential	$2,552	$1,124	2	$3,675
Portage County	X	Residential	$8,641	$0	2	$8,641
Portage County	C	Residential	$15,621	$7,814	2	$23,434
Portage County	X	Residential	$52,207	$4,397	2	$56,603
Portage County	X	Residential	$84,524	$0	2	$84,524
Portage County	C	Residential	$22,939	$0	2	$22,939

**Zone Types:*

- *100-Year Floods: A = special flood hazard area (SFHA), no base flood elevation provided*
- *AE = SFHA, base flood elevation provided (newer designation)*
- *500-Year Floods: C = area of minimal flood hazard, X = area of minimal flood hazard (newer designation)*
- *EMG = Emergency Program*

4.5.4 History

There have been 26 floods or flashfloods in Portage County between April 1996 and December 2019. These events have caused $28,430,500 in property damages and $20,000 in crop losses. Annually, this amounts to an average of 1.13 flood events with average annual damage from floods and flashfloods amounting to $1,230,000. There are no reported injuries or deaths. Described below are the three most damaging events, by property damage, over the past two decades. All events are listed individually in **Appendix A**.

Flooding in the City of Ravenna on June 27, 2019

Heavy rain fell across central Portage County on the evening of June 17, 2019. Rainfall estimates from local officials were two to three inches with a few reports of four inches which fell in an hour. Some roads were damaged and manhole covers blown off. Ten properties sustained minor water damage to basements and first floors.

This event caused $100,000 in property damage.

Flooding in Shalersville Township on July 10, 2013

High water closed most roads in Shalersville Township after an estimated three to four inches of rain fell within one hour. This rainfall was after 16 consecutive days with rain in the region. Subsequently the saturated ground could not absorb the water and widespread flooding resulted. The water came up so quickly that emergency officials had to evacuate homeowners. Several people became stranded in their cars or homes. Hardest hit areas include Wentworth Street in the Bolingbrook neighborhood and Aurora East where water was several feet deep in homes. The flood waters inundated about half of the 350 homes. The waters receded within an hour or two.

This event caused $2,400,000 in property damage.

Flooding in Northern Portage County on June 22, 2006

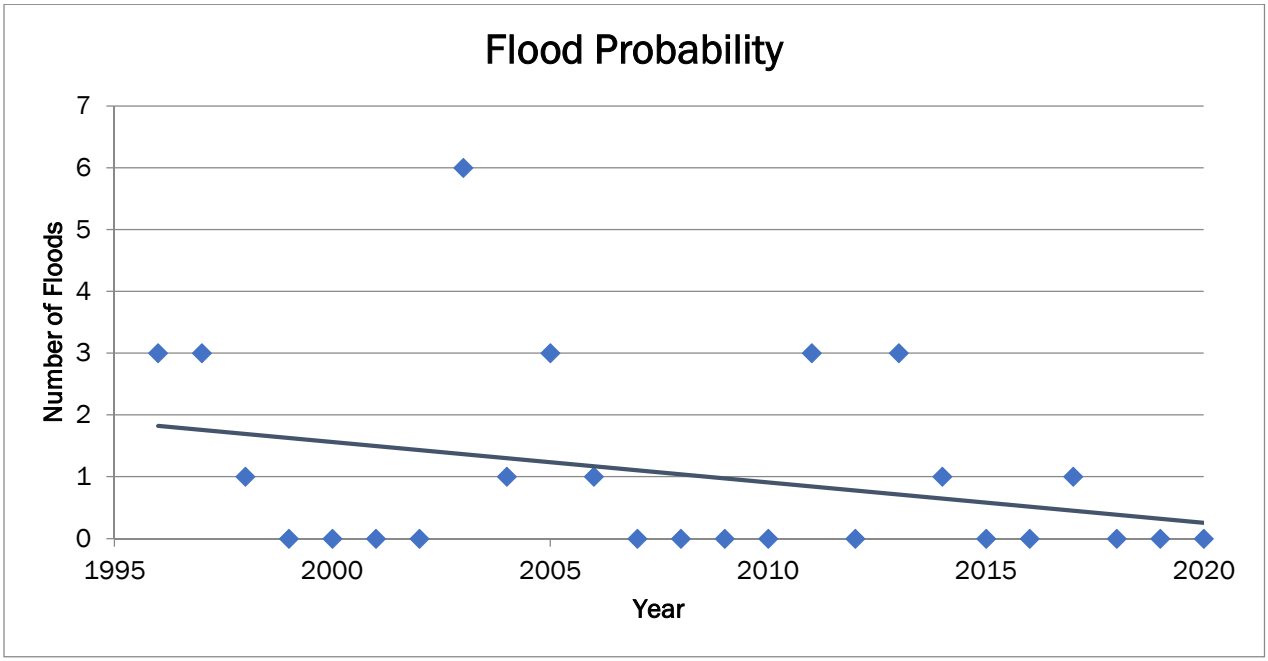
Thunderstorms dumped torrential rains on Portage County during the late afternoon and early evening hours of June 22, 2006. Radar estimated that as much as three to five inches of rain fell across the northern portion of the County. This rain fell on ground already saturated from earlier rains.

Flooding was reported in the City of Aurora with dozens of homes in the northern half of the city sustaining damage from flooding. Most of this was basement flooding and no significant structural damage was reported. Significant street flooding also occurred in the City of Streetsboro. Near the City of Ravenna, a stream left its banks and flooded much a mobile home park near SR-59. Several residents of the park had to be evacuated. Many other homes in the county also sustained damages, mainly from basement flooding. This event caused $100,000 in property damage.

4.5.5 Probability

Figure 4.5.2 shows the trend of flood events over time since April 1996, as this is the earliest year with complete data from the NCDC. Flood occurrences per year decline very slightly over time, which means Portage County can expect to have annual flood events similar to those that have occurred in the recent past. Annual data of the flood and flash flood events indicates that there is an annual probability of 1-2 flood events with average annual damages amounting to $1,230,000.

Figure 4.5.2 Flood Probability



4.5.6 Vulnerability Assessment

Infrastructure Impact

Floods can impact roadways, including interstates and state routes by blocking them due to high water or by filling them with debris.

Population Impact

Floods and flash floods have caused damages to occupied homes in the past. During flood events, shelter may need to be provided to those impacted by flooding.

Property Damage

Property damage is likely during floods, to both residential and non-residential properties. **Table 4.5.3** lists the value of all the properties that are exposed to 100-Year floods.

Table 4.5.3: Structure Vulnerability from Flooding

Structure Type	Number of Properties Exposed	Damages (Property, Content, Inventory)	Percent of Total
Residential	414	$26,715,968	76.2%
Commercial	25	$5,442,670	4.6%
Industrial	4	$2,918,180	0.7%
Agriculture	80	$7,805,387	14.7%
Religious	2	$54,063	0.4%
Government	18	$6,799,685	3.3%
Education	0	$0	0%

Loss of Life
There are five reported deaths from a flashflood event on June 27, 1998. Loss of life is possible in future floods or flash floods.

Economic Losses
Floods can halt economic activity, block roadways, and destroy agricultural crops. Building contents up to $25,000 are expected to be exposed during a 100-Year flood event. Crop losses are also expected during floods or flashfloods.

4.5.7 Land Use and Development Trends
Any development that occurs in flood zones will be at risk. Development in these areas should be limited. Flash flooding is more likely to occur in areas with a high percentage of impervious surfaces. Future land use practices should limit the percentage of impervious surfaces. **Chapter 5** contains mitigation actions that address these issues.

4.6 Hazardous Materials

4.6.1 Description

According to the Ohio Environmental Protection Agency, hazardous materials can be defined in different ways depending on the law or regulation administered by the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the U.S. Nuclear Regulatory Commission (NRC).

- The Institute for Hazardous Materials Management defines hazardous materials as "any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors."
- OSHA's definition includes any substance or chemical which is a health hazard or a physical hazard, including carcinogens, toxic agents, irritants, corrosives, and sensitizers, as well as agents that interact to be harmful to the human body, explosive, or flammable.
- The Environmental Protection Agency's definition includes the Occupational Safety and Health Administration definition. It also adds any item or chemical which can cause harm to people, plants, or animals when released into the environment.
- The Department of Transportation defines hazardous materials as any item or chemical which, when being transported or moved in commerce, is a risk to public safety or the environment.

The Ohio Environmental Protection Agency indicates that there are five categories in which materials can be hazardous, including acute, chronic, fire, reactive, or sudden release of pressure.

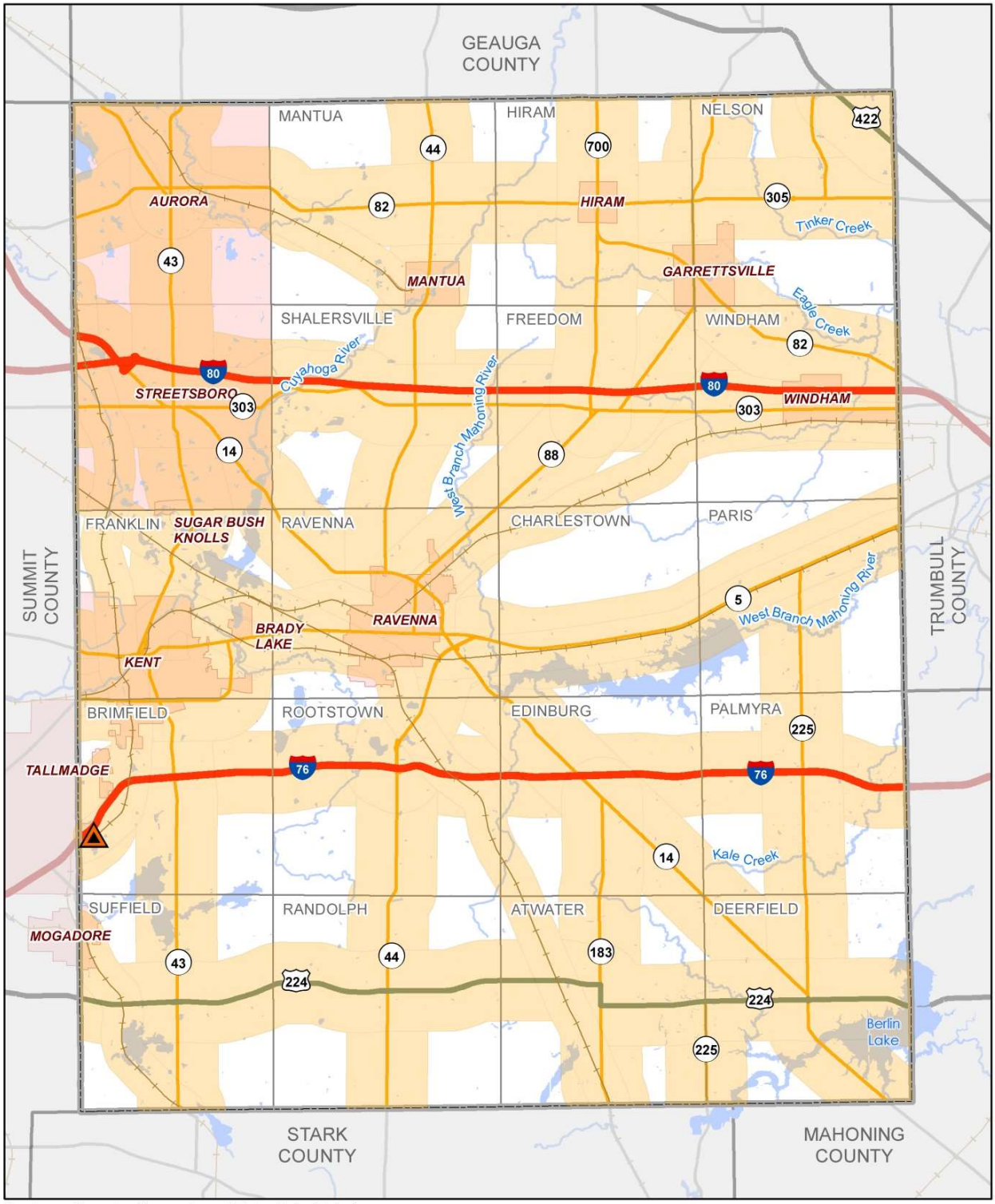
The U.S. Nuclear Regulatory Committee regulates materials that produce ionizing radiation, which includes by-product material and radioactive substances.

The Emergency Planning and Right to Know Act, or EPCRA, was passed as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), which requires a facility that processes, uses, or stores extremely hazardous substances or hazardous substances as classified by the Occupational Safety and Health Administration hazard communication standard. This is also codified in the Ohio Revised Code (ORC) Chapter 3750 and the Ohio Administrative Code Chapter 3750.

4.6.2 Location

Hazardous material spills can occur wherever hazardous materials are stored and during shipment to these facilities. **Figure 4.6.1** shows the areas which are at the highest risk of being impacted by hazardous materials spills. These areas were calculated by identifying normal shipping routes and placing a one-mile buffer around these routes.

Figure 4.6.1: Hazardous Materials Risk Area



4.6.3 Extent

The Environmental Protection Agency keeps records for Extremely Hazardous Substance facilities because these facilities have a higher probability of spills due to the higher amounts of hazardous materials at their sites. Each potential hazardous material has varying levels of toxicity. The concentration of these materials should be measured in parts-per-million to determine whether they present a threat. Many chemicals are safe at low amounts and low concentrations but can become dangerous and even toxic at high amounts and concentrations. Additionally, some chemicals can be flammable and can become more volatile when exposed to oxygen. In ground spills, untreated chemical and waste spills can contaminate the soil and drinking water, creating toxic environmental conditions. Corrosive, flammable, or explosive chemicals can create infrastructure damage depending on the location, amount spilled, and the circumstances of the incident. In worst case scenarios, large spills can trigger evacuations of residents and close transportation routes used for hazardous materials transportation, which can also affect local residents.

4.6.4 History

There have been 95 recorded hazardous material spills and releases in Portage County from May 2017 through March 2020 Estimated property and crop damages have not been recorded.

Table 4.6.1 lists the hazardous materials spills and releases in Portage County on record with the Ohio EPA from May 2017 through March 2020 (Source: Ohio Environmental Protection Agency).

Table 4.6.1: Hazardous Materials Spills

Location	Date	Product	Spill Size
Edinburg Township	June 7, 2018	Natural Gas	Unknown
Nelson Township	July 29, 2019	Oil Hydraulic Fluid(S)	Unknown
City of Ravenna	August 21, 2017	Boil Alert / Boil Advisory / Drinking Water Issue(S)	Unknown
City of Streetsboro	November 15, 2019	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	Unknown
City of Kent	August 16, 2019	Oil Petroleum Not Otherwise Specified (Nos)	20 Gallons
City of Kent	August 16, 2019	Latex	15 Gallons
Suffield Township	December 5, 2019	Orphan Container(S)	4 Items
City of Streetsboro	June 4, 2019	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	50 Gallons
Suffield Township	May 25, 2018	Tetrachloroethylene / Perchloroethylene (C2Cl4)	Unknown
Shalersville Township	August 11, 2018	Sediment / Sedimentation	Unknown
City of Streetsboro	September 10, 2019	Manure Horse	Unknown

Location	Date	Product	Spill Size
City of Streetsboro	June 19, 2019	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	29 Gallons
Rootstown Township	January 16, 2020	Oil Motor / Lube Oil / Vehicle	Unknown
Rootstown Township	January 16, 2020	Fuel Gasoline (25% Ethanol Not E85)	Unknown
Rootstown Township	January 21, 2020	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	Unknown
City of Ravenna	June 17, 2017	Waste Water	Unknown
City of Ravenna	April 30, 2019	Drum(S)	Unknown
Freedom Township	December 9, 2018	Oil Crude	Unknown
Freedom Township	February 27, 2020	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	50 Gallons
Freedom Township	February 27, 2020	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	50 Gallons
City of Ravenna	November 30, 2018	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	Unknown
Nelson Township	September 17, 2019	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	Unknown
Shalersville Township	April 16, 2019	Oil Transformer Non Pcb	10 Gallons
City of Streetsboro	July 17, 2019	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	60 Gallons
City of Aurora	June 23, 2019	Oil Transformer Non Pcb	Unknown
City of Ravenna	December 10, 2018	Sheen Rainbow / Hydrocarbon	Unknown
Edinburg Township	November 10, 2018	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	150 Gallons
City of Ravenna TWP	July 3, 2018	Waste Water	Unknown
Randolph Township	August 4, 2017	Fuel Gasoline (25% Ethanol Not E85)	25 Gallons
Franklin Township	October 2, 2019	Fuel Gasoline (25% Ethanol Not E85)	31 Gallons

Location	Date	Product	Spill Size
Atwater Township	June 23, 2019	Fuel Gasoline (25% Ethanol Not E85)	Unknown
Rootstown Township	January 17, 2020	Air Odor Gasoline / Hydrocarbon	5 Gallons
Brimfield Township	June 26, 2017	Acid Nos (Not Specified)	30 Gallons
City of Streetsboro	November 14, 2018	Propylene Glycol (C3H8O2)	1500 Gallons
Edinburg Township	August 8, 2019	Oil Transformer Non Pcb	20 Gallons
City of Kent	November 6, 2018	Ethylene Glycol (C2H6O2)	2 Gallons
City of Streetsboro	January 24, 2020	Sheen Rainbow / Hydrocarbon	Unknown
Shalersville Township	September 7, 2017	Fuel Oil/ Home Heating / Heating Oil	Unknown
Edinburg Township	July 12, 2019	Oil Transformer Non Pcb	Unknown
Edinburg Township	July 12, 2019	Oil Transformer Non Pcb	7 Gallons
City of Streetsboro	October 2, 2019	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	20 Gallons
City of Ravenna TWP	March 9, 2020	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	Unknown
Freedom Township	May 19, 2018	Fuel Diesel / Diesel Fuel (Vehicle On Or Off Road)	50 Gallons

4.6.5 Probability

Due to their unpredictable nature and the influence of human error, the probably of hazardous materials spills are difficult to quantify. Since hazardous material spills can occur at any time and they should be considered likely events.

4.6.6 Vulnerability Assessment

Infrastructure Impact

Roadways, waterways, and groundwater may be impact by hazardous materials spills. Road closures may occur as a direct or indirect result of hazardous materials spills.

Population Impact

The local population may be directly exposed to hazardous materials. If a large spill occurs, some residents may need to be evacuated and given shelter elsewhere.

Property Damage

Depending on the chemical, property damage is likely. Properties near Extremely Hazardous Substance facilities are likely to be damaged during a spill.

Loss of Life
While some hazardous materials can be toxic, loss of life from hazardous materials spills is unlikely. It is possible, however, and extreme precaution should be taken in the event of a spill.

Economic Losses
Economic losses can occur from the loss of hazardous materials that may be needed in manufacturing or for other processes. Road closures may lead to slowed commerce, and businesses impacted by hazardous materials spills may suffer property damage, damage to goods, or be required to close. **Table 4.6.2** provides property values for all structures at risk during hazardous materials spills.

Table 4.6.2: Structure Vulnerability from Hazardous Materials Spills

Structure Type	Number of Properties Exposed	Value of Vulnerable Structures		
		Land	Building	Total
Residential	4,224	$58,535,340	$132,090,220	$190,625,560
Non-Residential	2,559	$123,302,730	$245,392,780	$368,695,510
Critical Facilities	*620*	*$42,308,790*	*$150,183,020*	$192,491,810
Total	6,783	$181,838,070	$377,483,000	$559,321,070

4.6.7 Land Use and Development Trends
Development that has occurred since the previous plan and any future development near hazardous materials storage facilities may be impacted by hazardous materials spills. All land uses are equally impacted by potential hazardous materials spills.

4.7 Invasive Species

4.7.1 Description

Invasive Species are species that have potential negative impacts on the environment and economy of Portage County. Harmful species are both native and invasive. The National Oceanic and Atmospheric Administration (NOAA) defines an invasive species as "an organism that causes ecological or economic harm in a new environment and is not native." Harmful species are species that are native to a region, but that also cause significant ecological, public health, or economic harm. Their growth is often encouraged through human activity.

4.7.2 Location

Invasive species have the potential to impact any location within the County. Individual species are limited by habitat.

4.7.3 Extent

Portage County is part of the Ohio Department of Natural Resource's Northwest Portage County Woodland Plan. This plan includes collaboration between local partners, natural resource professionals, and public input. Participating communities include the City of Aurora, the City of Streetsboro, Freedom Township, Hiram Township, Mantua Township, and Shalersville Township. A list of invasive species within Ohio can be found in **Table 4.7.1**.

Table 4.7.1: Invasive Species in Ohio

Type	Name
Terrestrial Plant	Japanese Honeysuckle
Terrestrial Plant	Japanese Knotweed
Terrestrial Plant	Autumn-Olive
Terrestrial Plant	Buckthorns
Terrestrial Plant	Purple Loosestrife
Terrestrial Plant	Common Reed or Phragmites
Terrestrial Plant	Reed Canary Grass
Terrestrial Plant	Garlic Mustard
Terrestrial Plant	Multiflora Rose
Terrestrial Plant	Bush Honeysuckles
Terrestrial Plant	Wild Parsnip
Terrestrial Animal	Feral Swine
Insect	Asian Longhorned Beetle
Insect	Emerald Ash Borer
Insect	Gypsy Moth
Insect	Hemlock Wooly Adelgid
Aquatic Plant	Curlyleaf Pondweed

According to the Northwest Portage County Woodland Plan, there are at least four invasive insect species that have the potential to impact Portage County:

- The **Emerald Ash Borer** targets ash trees. This insect was first found in Ohio in 2003 and has been found in every county. Since the Emerald Ash Borer has been found in every county, there are no quarantines in effect within Ohio's borders; however, the State of Ohio is still listed in the Federal quarantine boundary.
- The **Hemlock Woolly Adelgid** was first discovered in Meigs County, but it has been observed in the eastern region of Ohio. As its name suggests, the Hemlock Woolly Adelgid impacts hemlock trees by stealing nutrients as the base of the tree's needles. Early infestations can be spotted when white, woolly sacs appear near the base of the needles. At a forest level, a thinning hemlock canopy could be caused by the Adelgid. All Hemlock Woolly Adelgids are female and reproduce asexually. Every year, one generation is born in the spring and one in the winter. Feeding and egg laying typically occur during the Autumn season, and hibernation or dormancy occurs during the growing season.
- The **Viburnum Leaf Beetle (VLB)** is native to Europe and was first discovered in North America in 1947 in Ontario, Canada. The first confirmed case in Ohio was in 2002 in Ashtabula County. Evidence suggested that the VLB may have been in Ashtabula County for at least two years before discovery. Adults are active from summer through fall, until the first killing frosts. There is only one annual generation, however a single female can lay up to 500 eggs. Infestations of the VLB can kill large numbers of shrubs and trees.
- The **Asian Longhorned Beetle (ALB)** was first discovered in Ohio in June 2012 in Clermont County. The ALB targets hardwood forests, which make up $5 billion dollars of Ohio economy.

The Northwest Portage County Woodland Plan also identifies the following fungi or diseases as potential threats to the County:

- **Beech Bark Disease** is caused by an interaction between beech scale and one of two Nectria fungi. Beech scale has been found in Portage County.
- **Thousand Cankers Diseased (TCD)** and the twig beetle that carries TCD have both been discovered in southern Ohio.

4.7.4 History

As mentioned above, the Emerald Ash Borer and Viburnum beetles are both known to exist in Portage County. The potential for Beech Bark Disease also exists within Portage County.

4.7.5 Probability

While the exact probability of experiencing invasive species is difficult to quantify, it is very probable that Portage County will see one or more of the invasive species listed above.

4.7.6 Vulnerability Assessment

Infrastructure Impact

There are no likely impacts to public roadways or utilities. Public trees may be destroyed or impacted by various invasive species.

Population Impact

There are no direct impacts to the population of Portage County from the invasive species discussed above; however, it is possible that as invasive species migrate, some will pose a greater risk to population health.

Property Damage
Due to the likelihood that one or more of these invasive species will impact Portage County, it is also likely that property damage, in the form of reduced values from impacts on landscaping, will occur.

Loss of Life
Loss of life due to the effects of invasive species is unlikely.

Economic Losses
Economic impacts can vary greatly depending on the target and of the invasive species and their impacts on those targets. If a large number of trees are severely damaged or killed by various invasive species, there may be indirect economic losses. Examples include increased heating and cooling costs, reduced property value, and reduction in viable lumber for construction.

4.7.7 Land Use and Development Trends
There are no likely impacts on development and land use due to invasive species.
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4.8 Landslide and Erosion

4.8.1 Description

The Ohio Department of Natural Resources (ODNR) defines a landslide as "a variety of downslope movements of earth materials. Some slides are rapid, occurring in seconds, whereas others may take hours, weeks, or even longer to develop." Landslides are commonly triggered by human-induced vibrations, over-steepened slopes, increased weight on a slope, and removal of vegetation on areas with landslide-prone slopes.

Erosion is the geological process in which earthen materials are worn away and transported by natural forces, such as wind or water. The movement of earthen materials by wind or water will be considered a landslide for the purposes of this Plan.

According to the Ohio Administrative Code 3901-1-48, mine subsidence is loss caused by the collapse or lateral or vertical movement of structures resulting from the caving in of underground mines, including coal mines, clay mines, limestone mines, and salt mines. Mine subsidence does not include loss caused by earthquakes, landslide, volcanic eruption, or collapse of strip mines, storm and sewer drains or rapid transit tunnels.

4.8.2 Location

Figure 4.8.1 shows the location of areas under risk for slope failure (landslides). Portage County is categorized as either low incidence of landslides or moderate susceptibility with low incidence of slope failure. There are no known active or abandoned underground mines in Portage County, mine subsidence will not be assessed further.

4.8.3 Extent

Landslides

There are three major types of landslides:

1. **Rotational slump**, caused by the movement of a mass of weak rock or sediment as a block unit along a slope. These are the largest types of landslides found in Ohio.
2. **Earthflow**, caused by a mass of rock or sediment flowing downslope. These are the most common landslides in Ohio.
3. **Rockfall**, a rapid downslope movement of large blocks of bedrock. Most rockfalls in Ohio involve sandstone or limestone that has been weakened by surface water.

4.8.4 History

Figures 4.8.2 and 4.8.3 show that Portage County has relatively low occurrences of landslides and rock falls as compared to other counties within Ohio, with 20 total landslide sites and five rockfall sites as of February 2020.

4.8.5 Probability

Landslides

According to the ODNR, Portage County falls within an area of low risk for slope failure. Landslides should be considered an unlikely event.

Figure 4.8.1: Landslide Incidence and Susceptibility Map (Source: Ohio EMA)

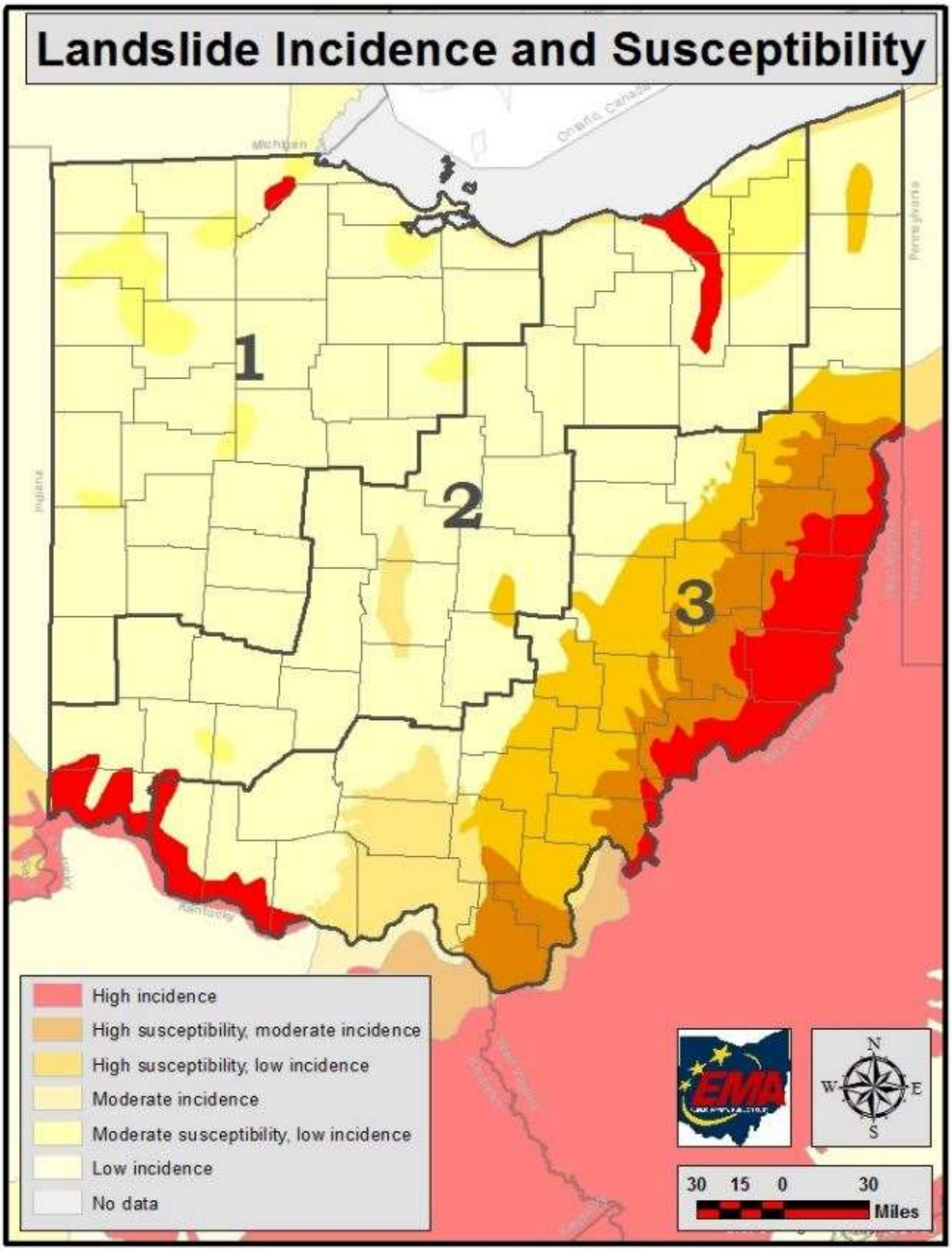


Figure 4.8.2: State of Ohio Total Geohazards Landslide Inventory (Source: Ohio EMA)

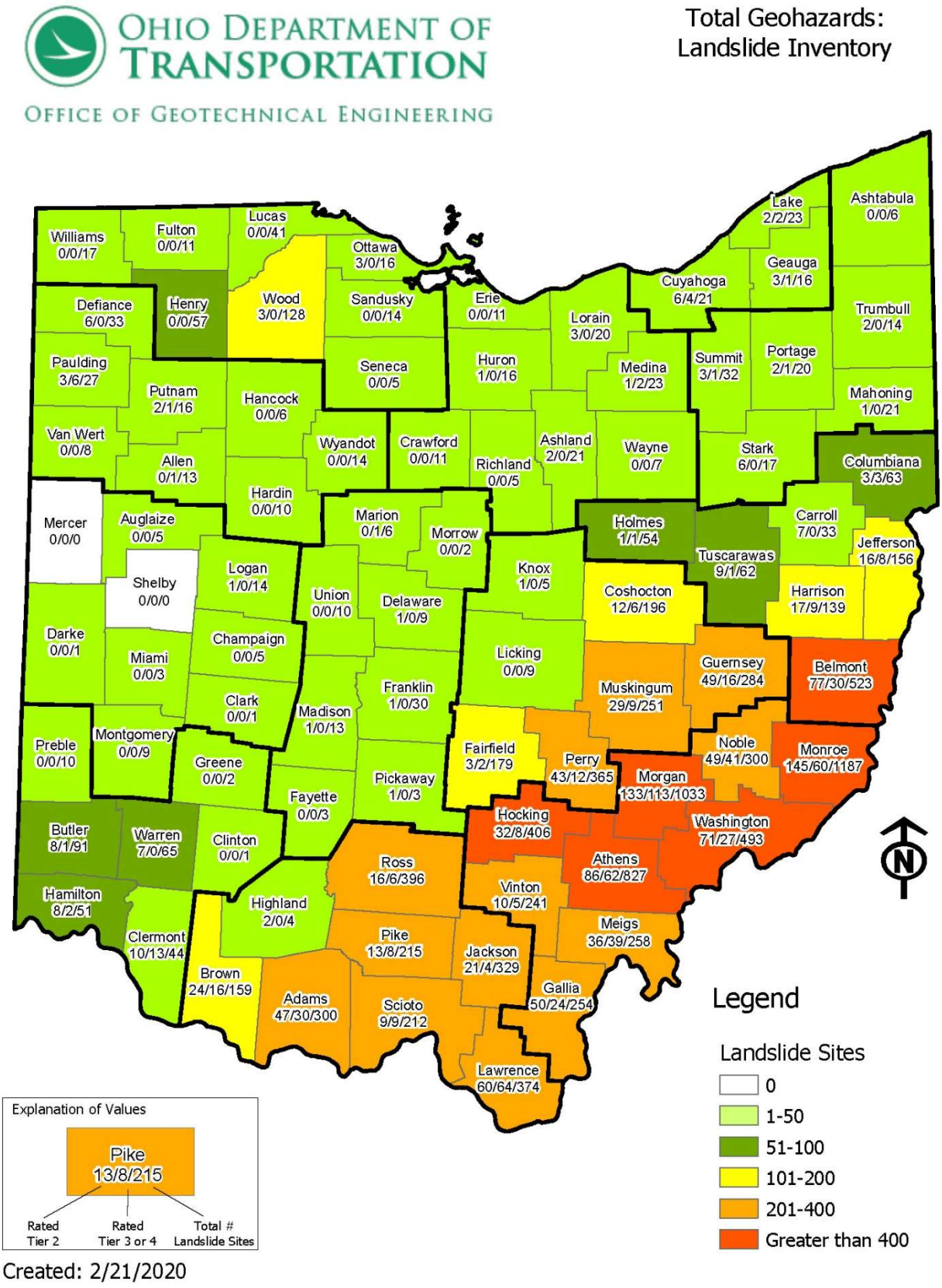
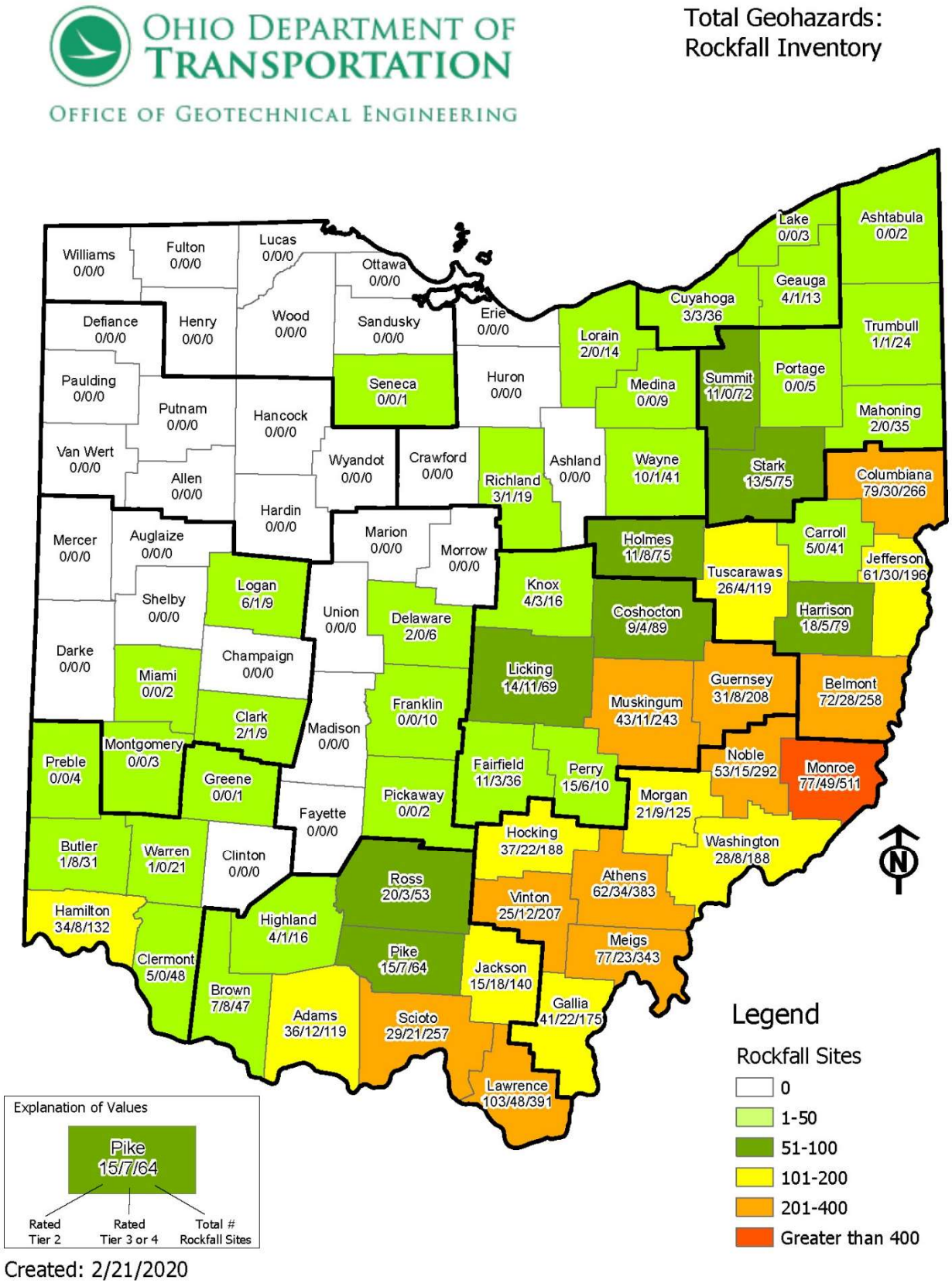


Figure 4.8.3: State of Ohio Total Geohazards Rockfall Inventory (Source: Ohio EMA)



4.8.6 Vulnerability Assessment

Infrastructure Impact

Landslides can block or damage roadways and damage existing utility infrastructure. Mine subsidence can occur under existing roadways or utility infrastructure, causing anything from minor damage to complete destruction.

Population Impact

Landslides can cause injury or death if a person is struck by or trapped under falling earthen material. Mine subsidence can cause sinkholes under occupied structures which could lead to injuries.

Property Damage

Properties caught in the path of a landslide can be completely destroyed or severely damaged. Properties, including structures, can be completely destroyed by mine subsidence.

Loss of Life

Loss of life is possible during mine subsidence or landslides. There are no known fatalities in Portage County due to mine subsidence or landslides.

Economic Losses

Both landslides and mine subsidence can block or destroy sections of roadways vital to shipping. Stores, storage facilities, and other structures that are important to economic activity can also be severely damaged or destroyed.

4.8.7 Land Use and Development Trends

Uses that serve vulnerable populations, such as schools and hospitals, should not be placed in areas that are in high-risk zones for landslides. Development should be limited to areas with minimal slope to reduce potential losses during landslides.

4.9 Severe Summer Weather

4.9.1 Description

Severe Summer Weather events may include severe thunderstorms, hail, and lightning. Tornadoes and flooding may also be related to Severe Summer Weather but due to the potential threat of these events, they are each discussed in separate risk assessments. While tropical storms and hurricanes are also forms of severe storms, Portage County does not have any record of such events affecting the County; therefore, the County has not deemed tropical storms and hurricanes to be a threat and these specific types of weather will not be addressed further.

According to the National Weather Service (NWS), a severe thunderstorm is a thunderstorm that produces a tornado, winds of at least 58 MPH, and/or hail at least one inch in diameter. A Severe Thunderstorm Watch is issued by the NWS if conditions are favorable for the development of severe Thunderstorms. A watch is usually in place for four to eight hours, during which time people should be prepared to move to safe place if threatening weather approaches.

A Severe Thunderstorm Warning is issued if either the WSR-88D radar indicates a severe thunderstorm or if a spotter reports a storm producing hail or winds meeting the criteria outlined in the description of a severe thunderstorm. The WSR-88D radar is an advanced Weather Surveillance Doppler Radar utilized by the NWS to generate a radar image. The NWS recommends that people in the affected area seek safe shelter immediately, as severe Thunderstorms have the potential to produce tornadoes with little to no advance warning. Lightning frequency is not a criterion for issuing a severe thunderstorm warning. The warnings are usually issued for one hour and can be issued without a Severe Thunderstorm Watch already in effect. The National Weather Service Forecast Office in Cleveland, Ohio is responsible for issuing Severe Thunderstorm Watches and Warnings for Portage County.

Lightning is caused by a rapid discharge of electrical energy that has built up in the atmosphere between clouds, the air, or the ground. Lightning strikes can be either direct or indirect. A direct strike is when lightning strikes a building or a specific zone, which can result in fusion points melting holes of varying sizes at the point of impact of materials with high resistivity. An indirect lightning strike is when lightning causes power surges that disrupt electrical equipment.

Severe storms can also create strong winds – often called “straight-line” winds to differentiate thunderstorm winds from tornadic winds. These winds, which have the potential to cause damage, are caused by an outflow generated by a thunderstorm downdraft.

Hail is a type of frozen precipitation that occurs when thunderstorm updrafts carry raindrops upward into extremely cold atmospheric zones where they freeze before falling to the ground. The resulting hailstones can fall at speeds greater than 100 MPH and range in size from smaller than 0.50 inches (the size of a pea) to 4.5 inches (the size of a softball) (Source: National Weather Service).

4.9.2 Location

Severe storms are a countywide hazard and all of Portage County is susceptible to severe weather.

4.9.3 Extent

Severe storm events have the potential to create large-scale damage in Portage County. Specifically, lightning is responsible for approximately 50 deaths annually across the United States, as well as hundreds of injuries (Source: NOAA). Winds have the potential to cause damage by bringing down tree limbs and generating widespread power outages. Both strong winds and hail can result in property damage. People living in mobile homes are especially at risk for injury and death due to strong winds. Even anchored mobile homes can be seriously damaged if winds gust over 80 MPH.

4.9.4 History

According to the National Climatic Data Center (NCDC), there have been 182 thunderstorm wind events, 126 hail events, and seven lightning events recorded in Portage County from January 1995 to December 2019. These events resulted in more than $15 million in property damage and $175,000 in crop damage. Average annual damage from these events amounts to $630,000. These events were not responsible for any deaths, but one lightning event caused two injuries. These events are summarized in **Table 4.9.1**, below. A complete list of severe storm events can be found in **Appendix A**.

Table 4.9.1: Thunderstorm-Related Events in Portage County since 1995

Severe Storm Event Type	Number of Events	Injuries	Deaths	Property Damages	Crop Damages
Thunderstorm Wind	182	0	0	$8,801,000	$10,000
Hail	126	0	0	$6,187,000	$165,000
Lightning	7	2	0	$175,000	$0
Total	**315**	**2**	**0**	**$15,163,000**	**$175,000**

The three most damaging events over the past decade are described below. Also described is an event in July 1996 during which lightning injured two people. Portage County has not been associated with any thunderstorm-related disaster declarations since the previous hazard mitigation plan.

Thunderstorm Winds in Portage County on November 5, 2017

Thunderstorm downburst winds in excess of 100 MPH caused extensive damage across northern Portage County. A 105 MPH wind gust was measured by an automated sensor in the City of Aurora. Damages stretched from the county line west of the City of Aurora across the northern tier of townships to the eastern end of the County. The damage was most concentrated in the City of Aurora and adjacent Mantua Township. Thousands of trees were downed across the County. Many homes lost roofing or siding and several others were damaged by fallen trees. Many vehicles were reported damaged by flying debris or from fallen trees or limbs. Widespread power outages occurred with full restoration taking around five days. Bleachers at an athletic field at Aurora High School were overturned and destroyed. Several school districts in Portage County were closed on November 6, 2017 and some on November 7, 2017 because of power outages. Clean up from the storms took weeks. This event caused $3,000,000 in property damage.

Thunderstorm Wind in the City of Ravenna on April 10, 2013

A 56-knot thunderstorm wind gust was measured in the City of Ravenna. Emergency Management reported one building collapsed with three others damaged. One of the damaged buildings may have shifted off its foundation. Broadcast media also relayed reports of pine trees down in the area. This event was responsible for $150,000 in property.

Thunderstorm Wind in the Portage County on July 26, 2012

Thunderstorm winds downed many trees in the area. At least five homes were damaged by fallen trees. This event caused $50,000 in property damage.

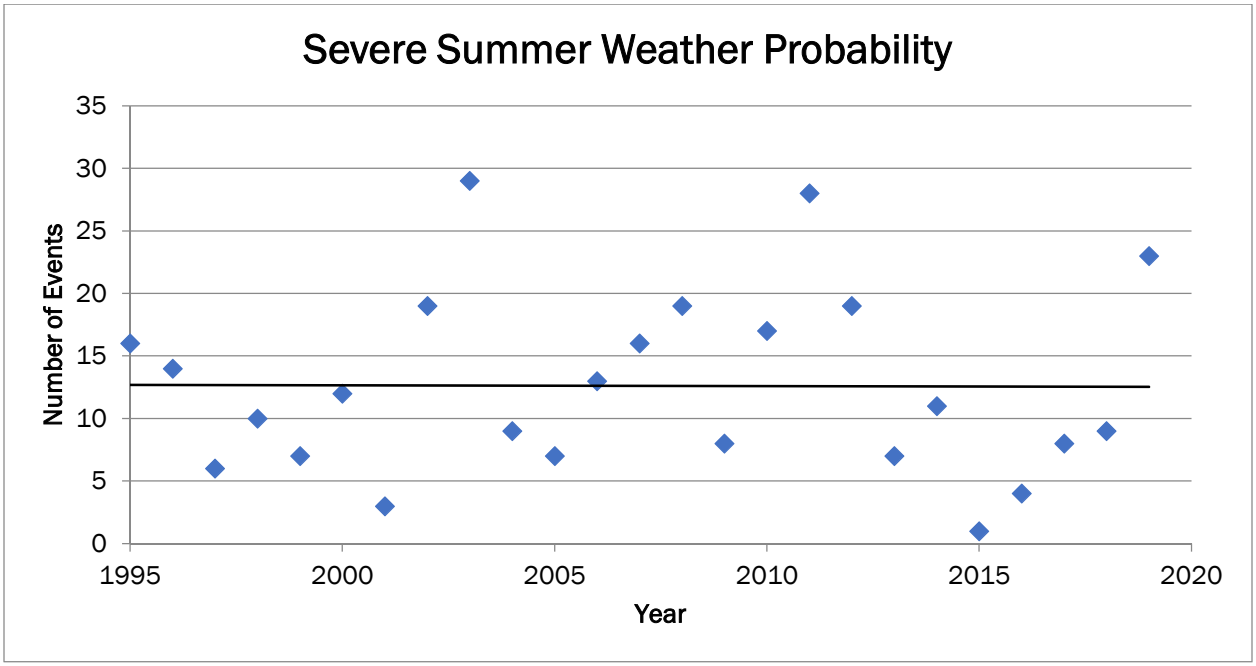
Lightning in Geauga Lake Park on July 13, 1996

Two people were injured when struck by lightning in the park parking lot. Injuries were minor. There were no reported property damages or crops damages.

4.9.5 Probability

Figure 4.10.1 below shows the trend in number of Severe Summer Weather events per year over time. The trend line has a flat slope, which indicates no change in frequency over time. Future years are likely to be similar to previous years. More specifically, there is an annual average of approximately 7.5 thunderstorm wind events, 5.3 hail events, and 0.29 lightning events. Annualized damages amount to an average of $630,000 in property and crop damages due to severe summer weather.

Figure 4.9.1: Severe Summer Weather Probability



4.9.6 Vulnerability Assessment

Infrastructure Impact

Above-ground infrastructure is at risk for storm damage by wind and falling debris. For infrastructure, high winds and hail are the most damaging part of a severe storm. High winds can strip bark from trees and detach limbs. If large branches fall, they can damage buildings and supporting above-ground infrastructure. In the most severe storms with high winds, large trees can be uprooted and have the potential to fall on buildings, including houses, which can cause harm or death.

Utilities are at risk for damage by severe storms, as well. Electrical lines are spread throughout the County connecting homes, businesses, and other facilities. Severe storms are likely to down tree limbs and generate other debris that can affect above-ground electrical lines, causing power outages. Downed power lines that are still live are extremely hazardous and can cause death by electrocution.

Population Impact

Summer storms are random in nature and affect the entire area of the County. Everyone within the County should be prepared during a storm event. Populations residing in mobile home parks are particularly vulnerable and should seek out shelters. Lightning has caused at least two injuries in Portage County.

Property Damage
Property damage is likely to occur during Severe Summer Weather either directly or indirectly through falling trees and other debris. Due to the non-site-specific nature of this hazard, **Table 4.9.2** lists all structures within Portage County as having potential impacts from severe storms.

Loss of Life
Although no loss of life was reported due to Sumer Summer Weather events on record with the NCDC, there is always potential for injuries and fatalities during severe weather.

Economic Losses
According to the NCDC, there have been 315 Severe Summer Weather events reported in Portage County from January 1995 to December 2019, with total losses reaching more than $15 million in property damage and $175,000 in crop damage. This amounts to between 12 and 13 severe storm events annually with average annual damages of $49,000. Thunderstorm events do not regularly result in damages to crops; however, it is a possibility. **Table 4.9.2** provides property values for all at-risk structures and properties in the County.

Table 4.9.2: Structure Vulnerability from Severe Storms

Structure Type	Number of Properties Exposed	Value of Vulnerable Structures		
		Land	Building	Total
Residential	80,297	$920,299,440	$2,677,260,670	$3,597,560,110
Non-Residential	19,542	$717,360,570	$2,965,010,620	$3,682,371,190
Critical Facilities	*3,459*	*$145,643,170*	*$1,917,178,810*	*$2,062,821,980*
Total	99,839	$1,637,660,010	$5,642,271,290	$7,279,931,300

4.9.7 Land Use and Development Trends
Severe storms can occur anywhere. Any development that has occurred since the previous plan and any future development has the potential to be impacted by severe storms.

4.10 Severe Winter Weather

4.10.1 Description

Severe winter weather includes winter storms, heavy snow, and extreme cold. Winter storms are events that have snow, sleet, or freezing rain as their primary type of precipitation. While the precipitation itself is typically not dangerous, frozen roads and exposure to cold can cause death and injury.

A winter storm forms under the right combination of three causes.

- Below freezing temperatures in the clouds and near the ground, which are necessary to make snow and ice.
- Lift, which raises the moist air from the clouds and causes precipitation. Warm air colliding with cold air and being forced to rise over the cold is an example of lift.
- Moisture is needed to form clouds and precipitation. Air blowing across a body of water is a common source of moisture.

Winter storms are categorized by their type: blizzards, ice storms, lake effect storms, and snow squalls.

1. **Blizzards** are winter storms that are a combination of blowing snow and wind which lead to very low visibility. Heavy snowfalls and severe cold often accompany blizzards, but this is not required. Ground blizzards occur when strong winds pick up snow that has already fallen.
2. **Ice Storms** occur when at least a quarter inch of ice accumulates on exposed surfaces. Roads and sidewalks can become dangerously slick, and trees and powerlines can easily break under the weight of accumulated ice.
3. **Lake Effect Storms** are cold, dry air masses that move over the Great Lakes regions and drop the moisture as snow in areas near the Great Lakes.
4. **Snow Squalls** are brief, intense snow showers accompanied by strong winds. Accumulation may be significant.

4.10.2 Location

Winter storms are typically large events that will impact the entire County and have the potential to impact multiple counties.

4.10.3 Extent

According to the County EMA Director, the northern portion of Portage County experiences more severe winter weather than the southern portion as the snow line runs through the County.

4.10.4 History

There have been at least 65 winter storm events in Portage County between January 1996 and December 2019. These events have caused at least $9,754,000 in property damage. Average annual damage from these events amounts to $424,087. There are no reported injuries, deaths, or crop losses.

There have been two emergency declarations covering Portage County. The public assistance amount for each emergency declaration was divided between all jurisdictions impacted by the event, including those outside of Portage County. These events occurred between 1977 and 1978.

The three severe winter weather events described below are the most damaging events to have occurred over the last decade. No severe wither weather events have caused injuries or deaths in Portage County.

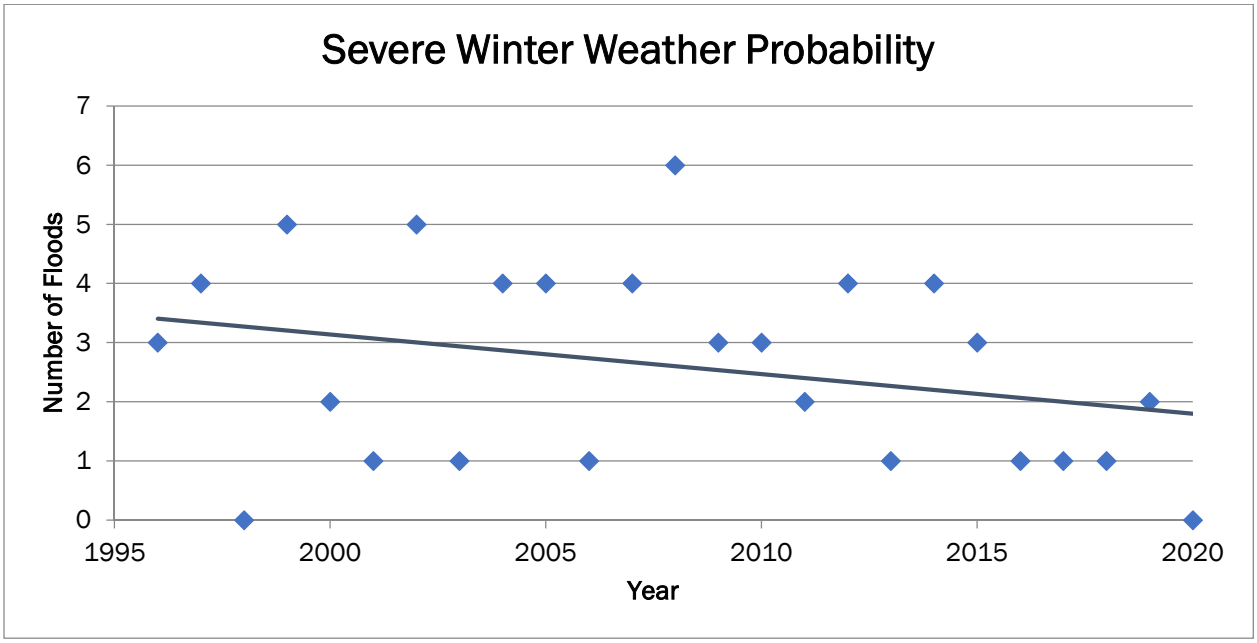
Winter Storm in Portage County on February 1, 2015
Snow started during the early morning hours of the February 1, 2015. The snow was initially light with accumulations of a few tenths of an inch per hour. After daybreak the snow intensified. By mid-morning visibility was less than half a mile with snowfall rates of one inch or more per hour. The snow briefly changed to freezing rain and then rain for a few hours late on February 1, 2015 and early on February 2, 2015. The snow returned before daybreak and ended during the early evening hours of February 2, 2015. Strong northeast to northwest winds accompanied the precipitation with gusts in excess of 25 miles per hour for much of the storm. This caused considerable blowing and drifting. A peak total of 8.9 inches was reported at the City of Streetsboro along with a slight coating of ice. Travel was severely disrupted by this storm. Schools were closed over most of Portage County on February 2, 2015. This event caused $250,000 in property damage.

Heavy Snow in Portage County on February 15, 2016
An area of low pressure moved across western Pennsylvania on February 15 and February 16, 2016, bringing the first heavy synoptic snow of the season to northeastern Ohio. Visibilities from late evening on February 15, 2016 through daybreak on February 16, 2016 were less than one mile and at times less than one half mile. The snow ended from west to east during the late morning hours of February 16, 2016. More than six inches of snow fell east of a line from Portage County to central Ashtabula County. Numerous accidents were reported during this event throughout the region along with a few power outages. Many schools were closed on February 16, 2016. This event caused $150,000 in property damage in Portage County.

Winter Storm in Portage County on January 19, 2019
Snow spread into northeast Ohio during the morning hours of January 19, 2019, as low pressure moved into the Ohio Valley region. Snow was very light to start, but by the afternoon of January 19, 2019 moderate-to-heavy snow moved into the area with snowfall rates of one to two inches of snow per hour. Snowfall rates decreased by the evening hours of January 19, 2019. Snow transitioned to lake effect snow over the area and mostly impacted the secondary Snow Belt areas of northeast Ohio on January 20, 2019. Snow lingered through the evening hours of January 20, 2019 before dissipating. Strong northeast to northwest winds accompanied the snow with gusts in excess of 25-mph for much of the storm, allowing for considerable blowing and drifting. Travel was severely disrupted by this storm. Roads in rural areas were nearly impassable at times. However, this snow event occurred over a holiday weekend, allowing for generally minimal impacts, as schools were closed. Numerous businesses and churches were closed for the weekend. In Portage County, snowfall totals ranged from eight to 14 inches of snow for the event. A peak total of 14 inches of snow was recorded in both the City of Kent and the City of Streetsboro. Other snow totals from the county include 13 inches in the City of Ravenna and the Village of Hiram, 10 inches at Berlin Lake Dam, and eight inches in the Village of Mogadore.

4.10.5 Probability
Figure 4.10.1 shows the trend of severe winter weather events over time between January 1996 and February 2020. The trend line slopes downward very slightly, showing that severe winter weather events per year are steady over time, which means Portage County can expect to have annual severe winter weather events similar to those that have occurred in the recent past. Annually, Portage County can expect to have between two and three (2.82) severe winter weather events annually with average damages amounting to $424,087.

Figure 4.10.1: Severe Winter Weather Probability



4.10.6 Vulnerability Assessment

Infrastructure Impact

Winter storms can cause damage to overhead utilities. Wires in particular can collapse under the weight of accumulated snow and ice. Debris can block roadways or damage property as tree limbs can also collapse under the weight of accumulated snow and ice. Water pipes can be frozen under extreme low temperatures that may accompany severe winter storms.

Roads and sidewalks can be blocked by the accumulation of snow, as well as being iced over.

Population Impact

All residents of Portage County are expected to be impacted by severe winter storms. The elderly and children may be more severely impacted by extreme cold. Those who are living within the Snow Belt may be more greatly impacted by severe winter weather.

Property Damage

Property can be damaged by accumulated snow and ice, debris, and falling wires. Extreme low temperatures can also freeze the water in pipes which could cause them to explode. All buildings are in the County are exposed and vulnerable to winter storms. Severe winter storms have caused an annual average of $424,087 in property damage in Portage County.

Loss of Life

There are no reported deaths from any severe weather event in Portage County. However, there may be indirect deaths that occur from winter storms. Likely causes of death are from iced over and dangerous roads which lead to vehicular accidents, hypothermia from prolonged exposure to cold, and heart attacks from heavy snow shoveling.

Economic Losses

Economic losses can occur from businesses shutting down for potentially long periods of time. Economic activity can be completely halted during winter storms, including transportation of goods.

Electricity outages may lead to spoiled goods. Since winter storms occur during the winter season, damages to crops are unlikely. **Table 4.10.1** provides property values for all at-risk structures and properties in the County.

Table 4.10.1: Structure Vulnerability from Severe Winter Storms

Structure Type	Number of Properties Exposed	Value of Vulnerable Structures		
		Land	Building	Total
Residential	80,297	$920,299,440	$2,677,260,670	$3,597,560,110
Non-Residential	19,542	$717,360,570	$2,965,010,620	$3,682,371,190
Critical Facilities	*3,459*	*$145,643,170*	*$1,917,178,810*	*$2,062,821,980*
Total	99,839	$1,637,660,010	$5,642,271,290	$7,279,931,300

4.10.7 Land Use and Development Trends

Winter storms can occur anywhere. Any development that has occurred since that previous plan and any future development has the potential to be impacted by winter storms. All land uses are equally impacted by severe winter weather.

4.11 Terrorism & Active Aggressor

4.11.1 Description

The terrorism hazard is assessed as a way to monitor different types of terrorism and acts of violence inflicted on a civilian population. Terrorism is defined as "the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives" (28 CFR, Section 0.85). Tools used to conduct acts of terrorism include Weapons of Mass Destruction (WMD), biological, chemical, nuclear, and radiological weapons, arson, incendiary, explosives, armed attacks, industrial sabotage, intentional hazardous materials release, and cyberterrorism.

The Federal Bureau of Investigations (FBI) produces an annual terrorism report, which contains profiles and chronologies of terrorism incidents in the United States. Terrorism can be both International and Domestic, where International Terrorism is defined as acts "perpetrated by individuals and/or groups inspired by or associated with designated foreign terrorist organizations or nations (state-sponsored)" (Source: FBI). The second is Domestic Terrorism, defined as acts "perpetrated by individuals and/or groups inspired by or associated with primarily U.S.-based movements that espouse extremist ideologies of a political, religious, social, racial, or environmental nature" (Source: FBI).

Types of terrorism include cyberterrorism, agroterrorism, terrorism (biological), and terrorism (chemical). Stakeholders have also requested discussion on active aggressors as part of this hazard assessment. These types of terrorism and other complex/coordinated events are defined below:

- **Cyberterrorism:** Cyberterrorism is an electronic attack using one computer system against another, and attacks can be directed towards computers, networks, or entire systems. A cyber-attack may last minutes to days. Homeland Security, the FBI, and the Federal Communications Commission Department of Justice are often involved in developing countermeasures that focus on reducing the threat, vulnerability, and likelihood of attack.
- **Agroterrorism:** Agroterrorism is a direct, generally covert contamination of food supplies or the introduction of pests and/or disease agents to crops and livestock. An agricultural-based terror attack can last days to months.
- **Biological Terrorism**: Biological terrorism includes use of bacteria, viruses, or toxins to incite terror. This mode of terrorism can last minutes to months.
- **Chemical Terrorism**: Chemical terrorism includes use of nerve agents, choking agents, blood agents, or blister agents, to attack normal bodily functions of the nervous, respiratory, circulatory, and skin, respectively. Usually, an act of chemical-based terror lasts only minutes.
- **Active Aggressor:** An active aggressor is an armed individual or group of individuals that is intending to cause harm or inflict terror on a civilian population. An active aggressor (or group) may be armed with guns, knives, bombs, or any other weapon/implement that may be used to inflict harm.

4.11.2 Location

Terrorism events have generally been localized within a single jurisdiction. Coordinated events have occurred historically, greatly expanding the number of affected jurisdictions. Based on the nature of the event, several jurisdictions may respond to an incident.

4.11.3 Extent

The extent of each of these terrorism events includes:

- **Cyberterrorism**: Typically, the built environment is unaffected by a cyber-attack. Inadequate security can facilitate access to critical computer systems, allowing them to be used to conduct attacks.
- **Agroterrorism**: The extent of the effects varies by type of incident. Inadequate security can facilitate the adulteration of food and introduction of pests and disease agents to crops and livestock.
- **Biological Terrorism**: A biological attack could cause illness and even kill hundreds of thousands of people, overwhelm public health capabilities, and create significant economic, societal and political consequences. Public health infrastructure must be prepared to prevent illness and injury that would result from biological terrorism.
- **Chemical Terrorism**: Most chemical agents are capable of causing serious injuries or death, and their often-rapid course of action, means there is very little time to act when an act of chemical terrorism occurs. Public health infrastructure must be prepared to prevent illness and injury that would result from chemical terrorism.
- **Active Aggressor**: Active aggressor incidents often occur in areas where a number of people gather regularly. This may be a place of employment, a neighborhood gathering area (church, recreational center, school, etc.), or other location.

Terrorist threats may also occur among school districts within the County. Threats can last several hours or even days and cause multiple problems such as disturbing a school's order, causing traffic jams, and inducing civil panic. Individuals, groups, and institutions should be aware of, and understand how to react to, such potential threats immediately and appropriately.

4.11.4 History

There have been no reported terrorism events in Portage County. Terrorist plots have been thwarted in Columbus, Dayton, Cincinnati, and Cleveland, among other locations. Mass shootings, such as a school shooting, are an example of an Active Aggressor situation. While there are no recorded school shootings or terrorism incidents in Portage County, local officials have determined that the risk of such an incident occurring in Portage County exists.

4.11.5 Probability

Terrorism-related events are not predictable. As these events are man-made, they should be considered unlikely but not impossible. Cyberattacks are becoming more likely, with 21,239 public sector attacks occurring nationwide in 2016 according to the U.S. Council of Economic Affairs. Utility systems experienced 32 attacks nationwide in 2016.

4.11.6 Vulnerability Assessment

Infrastructure Impact

Above ground structures such as government buildings, churches, libraries, and schools, as well as below-ground infrastructure such as natural gas pipelines, are at risk for terrorism damage. Acts of cyberterrorism have the potential to target systems that may influence or control infrastructure.

Population Impact

The population of Portage County is likely to be impacted should an act of terror occur. It is important that public health organizations are prepared to prevent illness and injury that may result from acts of terror.

Property Damage
Since coordinated incidents can occur anywhere within the County, property damage is a possible outcome of such an event. Agroterrorism may result in damage to crops, and an active aggressor situation may result in minimal property damage.

Loss of Life
Acts of terror are likely to result in loss of life. It is important that public health and healthcare organizations are prepared to act quickly should an act of terror occur.

Economic Losses
Since the probability of a coordinated attack happening in Portage County is low, local terrorism-related economic losses are not likely. However, terror attacks occurring in other locations have the potential to have economic impacts in Portage County.

Transportation networks, such as air transportation, can be shut down as a result of terrorism, impeding profits and resulting in economic losses to organizations within the County. Any nationwide complex/coordinated attack or act of terror that results in a temporary freeze of goods or services has the potential to limit or suspend economic activity in Portage County as well.

4.11.7 Land Use and Development Trends
Terrorism-related events can occur anywhere. Non-residential land uses are more likely to be targeted for terror events or active shooters. Schools and government buildings should have active shooter plans in place.

4.12 Tornadoes

4.12.1 Description

FEMA defines a tornado as 'a violently rotating column of air extending from a thunderstorm to the ground.' Tornadoes can generate wind speeds of greater than 250 MPH. Tornado paths can be as large as one-mile-wide and 50 miles long. Nationally, there is an average of 800 tornadoes reported annually across all 50 states.

In general, the midsection of the United States experiences a higher rate of tornadoes than other parts of the country because of the recurrent collision of moist, warm air moving north from the Gulf of Mexico with colder fronts moving east from the Rocky Mountains. Supercells, which form from rotating thunderstorms, are the most destructive variety of tornado.

Tornado Warnings are issued by the Cleveland, Ohio NWS Forecast Office when a tornado is indicated by the WSR-88D radar or sighted in person by spotters. The WSR-88D radar is an advanced Weather Surveillance Doppler Radar utilized by the NWS to generate a radar image. Once a warning has been issued, people in the warning area should seek shelter immediately. Warnings will include the location of the tornado, as well as what communities will be in its path. A tornado warning can be issued without a tornado watch, and they are typically issued for 30 minutes at a time. If the thunderstorm responsible for the formation of the tornado is also producing large volumes of rain, the tornado warning may be combined with a Flash Flood Warning. The NWS Office will follow up any Tornado Warnings with Severe Weather Statements to provide up to date information on the tornado and inform the public when the warning is no longer in effect. (Source: NWS).

4.12.2 Location

Tornadoes can occur anywhere in Portage County. All areas and jurisdictions should be considered at risk for a tornado.

4.12.3 Extent

Tornadoes are measured by damage scale for their winds, with greater damage equating greater wind speed. The original Fujita Tornado Damage Scale (F-scale) was developed in 1971, without much consideration to a structure's integrity or condition as it relates to the wind speed required to damage it. The Enhanced Fujita-scale (EF-Scale) took effect on February 1, 2007. This scale starts with the original F-scale's F0-F5 ratings and also classifies tornado damage across 28 different types of damage indicators. These indicators mostly involve building/structure type and are assessed at eight damage levels from 1-8. Therefore, construction types and their relative strengths and weaknesses are incorporated into the EF classification given to a particular tornado. The most intense damage within the tornado path will generally determine the EF scale given the tornado. **Table 4.12.1** lists the classifications under the EF- and F-scale. It should be noted that the wind speeds listed in this table are estimates based on damage rather than measurements.

There are no plans by National Oceanic Atmospheric Administration (NOAA) or the National Weather Service to re-evaluate the historical tornado data using the enhanced scale. Therefore, this Plan and subsequent plans will reference both scales until a complete switchover is deemed necessary.

Figure 4.12.1, below, simulates an extremely destructive, worst case scenario EF5 tornado and its impacts on Portage County assets and infrastructure. The worst-case scenario is simulated by running the EF5 tornado on a straight path through the most populated areas of the County. This theoretical scenario is performed to determine maximum potential damage within the County.

Figure 4.12.1: Worst Case Tornado Scenario

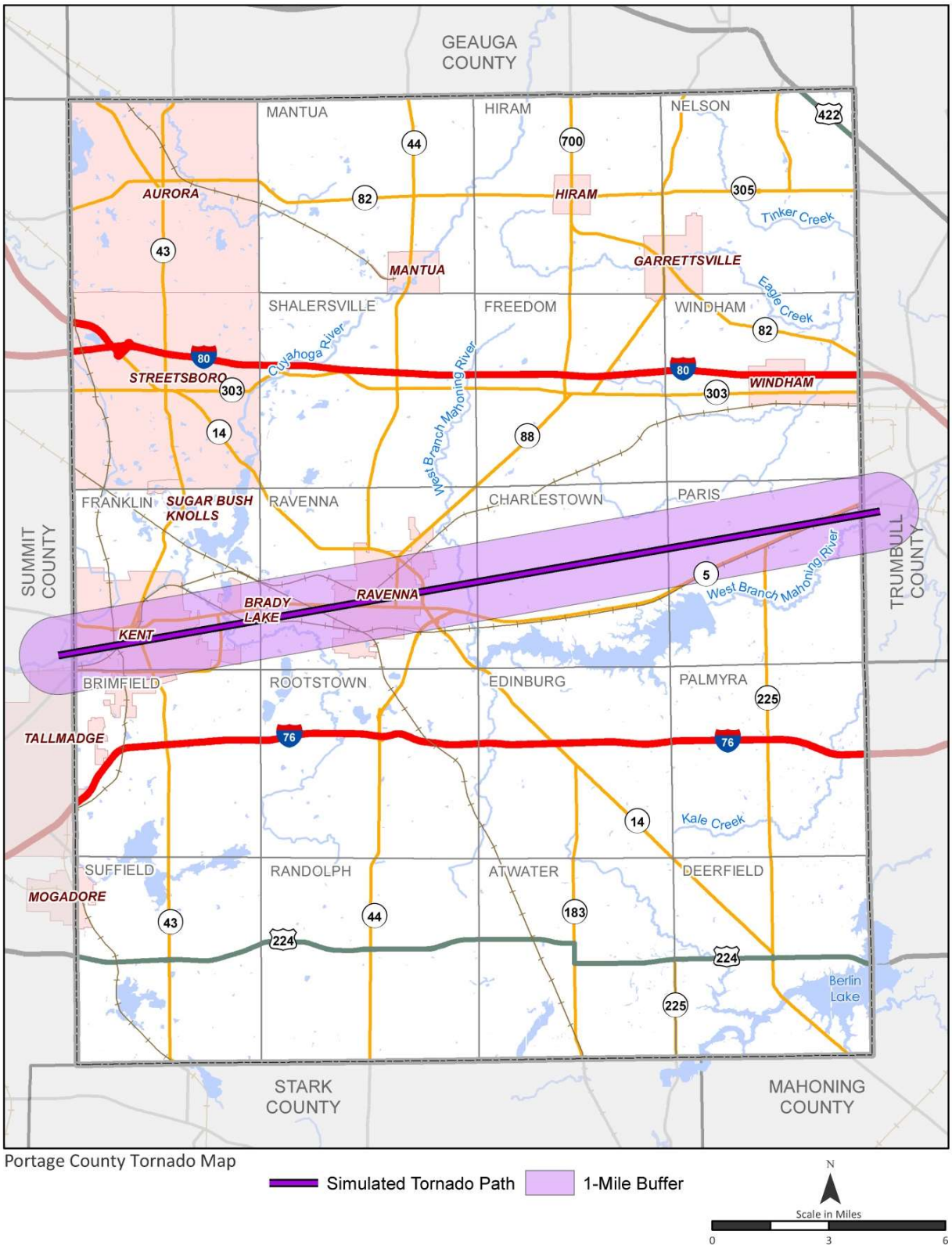


Table 4.12.1 Fujita and Enhanced Fujita Scale Classifications (Source: SOHMP)

Fujita Scale 3-Second Wind Gust (MPH)		Damage Levels	Enhanced Fujita Scale 3-Second Wind Gust (MPH)	
F0	45-78	**Light Damage**: Tree branches down.	EF-0	65-85
F1	79-117	**Moderate damage**: Roof damage.	EF-1	86-110
F2	118-161	**Considerable damage**: Houses damaged.	EF-2	111-135
F3	162-209	**Severe damage**: Buildings damaged.	EF-3	136-165
F4	210-261	**Devastating damage**: Structures leveled.	EF-4	166-200
F5	262-317	**Incredible damage**: Whole towns destroyed.	EF-5	Over 200

EF-0 to EF-2 tornadoes occur more frequently but are significantly less damaging than EF-3 to EF-5 tornadoes. A tornado event that is at least an EF-3 could cause significant damage to Portage County, including a high risk of injury or loss of life.

4.12.4 History

There have been five tornadoes in Portage County between January 1998 and December 2019, resulting in a total of $110,000 in property damage and no crop damage. There were no reported deaths or injuries. Two of these events occurred in the last ten years. Annualized property damages from January 1998 to December 2019 average to approximately $22,000. The two tornadoes that occurred within the past decade are described below, plus an EF-5 tornado from 1985, which was described for the purposes of this Plan by the County EMA Director. Data prior to 1998 is inconsistent and may skew accurate probability and threat assessments. As such, data for this section and the probability section is based on years since 1998.

Tornado in Portage County on May 31, 1985

An EF-5 tornado touched down in Portage County during the evening of May 31. Nine people in Portage County were killed and hundreds were injured in the tornado's 41-mile path.

Tornado in Portage County on September 10, 2014

Several EF-0 tornados impacted Franklin Township, the Village of Hiram, and the City of Ravenna in the afternoon of September 10, 2014. One severe storm produced several tornadoes throughout the County causing $60,000 in property damage.

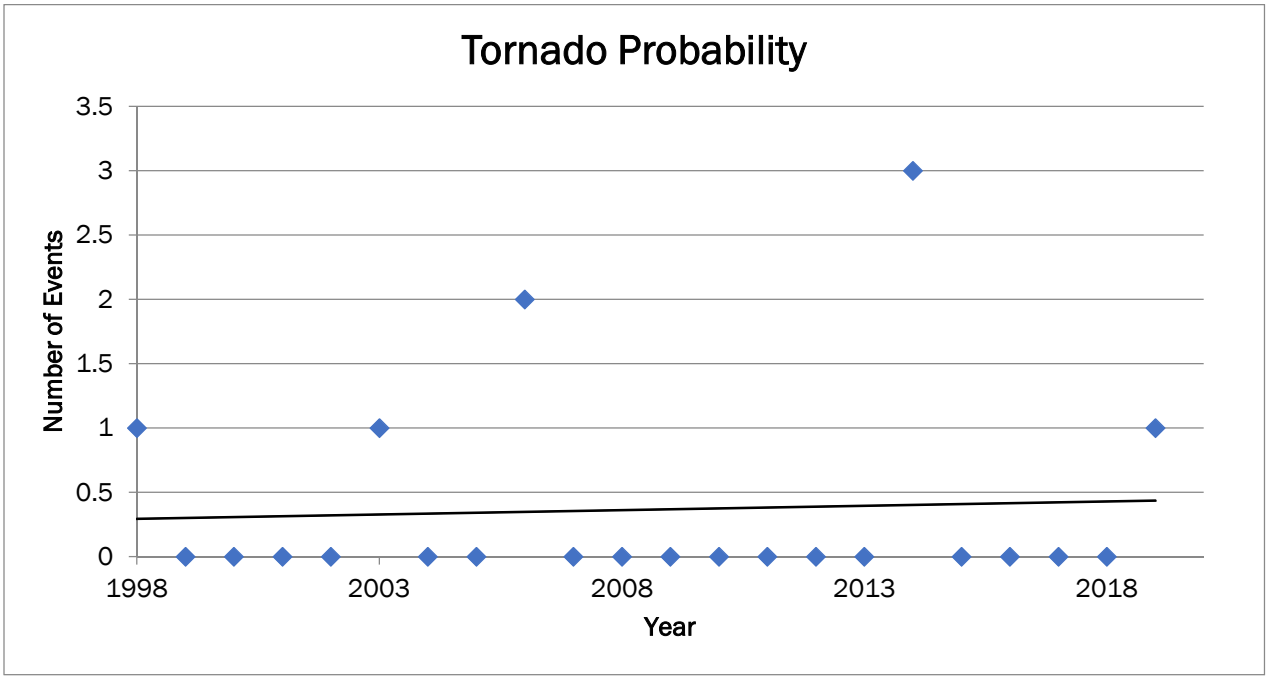
Tornado in the Community of Mahoning on June 16, 2019
An EF-1 tornado touched down in far northeast Portage County. The tornado briefly tracked northeast before turning to the east-southeast into Trumbull County. The tornado destroyed several outbuildings and produced extensive tree damage. This tornado caused $25,000 in property damage.

4.12.5 Probability

There have been five tornado events in Portage County since January 1998, when the NCDC begins to have reliable data, with two of these events occurring within the past decade. Annually, there is a 21 percent chance of a tornado (an average of 0.21 tornadoes per year). Tornadoes have caused an average of $14,000 in property damage. Since January 1988, no tornadoes have been stronger than an EF-1.

Figure 4.12.2 shows the trend line for the number of tornado events per year over time. The trend line has a slightly positive slope, which indicates that the number of events is remaining relatively steady over time.

Figure 4.12.2: Tornado Probability



4.12.6 Vulnerability Assessment

Infrastructure Impact
Above ground infrastructure can be damaged by high tornado winds. Debris caught in the high winds can also cause damage to buildings and infrastructure, including road closure. Above ground utility infrastructure can be damaged or destroyed, which can cause service outages.

Population Impact
Tornadoes are random in nature and have the potential to occur anywhere in the County. Everyone within the County should be prepared for a tornado. Residents in mobile home parks are particularly vulnerable and should have a plan in place.

Property Damage
Tornadoes can cause significant damage to buildings and properties. There have been five tornado events in Portage County which have caused more than $110,000 in property damage. Annually, this amounts to around $10,000 in property damage. **Table 4.12.2** details the structure vulnerability modeled from the worst-case scenario tornado for Portage County, which is depicted in **Figure 4.12.1**.

Loss of Life
While there are no reported deaths or injuries from tornadoes in Portage County, there is potential for loss of life during any tornado event.

Economic Losses
Tornadoes can cause major damage to structures and roads. Higher severity tornadoes have the potential to completely destroy structures. Debris also has the potential to cause damage to structures by breaking windows, damaging walls, or falling directly onto buildings and above-ground infrastructure.

Damages to utilities and roadways may also cause economic damage due to business closures, destruction of goods that require electricity, and halting economic activity.

Table 4.12.2: Structure Vulnerability from Tornadoes

Structure Type	Number of Properties Exposed	Value of Vulnerable Structures		
		Land	Building	Total
Residential	14,201	$98,748,670	$307,637,470	$406,386,140
Non-Residential	3,591	$147,681,040	$1,889,064,570	$2,036,745,610
Critical Facilities	*1,063*	*$70,542,600*	*$1,599,860,110*	*$1,670,402,710*
Total	17,792	$246,429,710	$2,196,702,040	$2,443,131,750

4.12.7 Land Use and Development Trends
Tornadoes can occur anywhere. Any development that has occurred since that previous plan and any future development has the potential to be impacted by tornadoes.

4.13 Transportation

4.13.1 Description

Hazards relating to modes of transportation and the failure of transportation systems may result in accidents and emergencies as well as other secondary effects such as fires, explosions, and release of hazardous materials. Transportation hazards can arise from aviation, marine/waterborne, public transit, rail, and road and highway systems. Ohio Department of Transportation (ODOT) is the primary emergency support agency responsible for transportation emergencies for Portage County.

4.13.2 Location

Transportation hazards can occur anywhere within or around the County with immediate impacts limited to the site of the accident, but secondary impacts can have a wider scope. Ohio has an extensive transportation network of roads and highways, rail lines, waterways, and air travel that supports the State's economy.

Portage County contains many major roadways, including 20.350 miles of turnpike, 23.401 miles of interstate routes, 23.230 miles of US routes, and 204.228 miles of state routes. 117.041 miles of roadway within the County are part of the National Highway System. Additionally, the County contains 368.276 miles of county roads and 417.030 miles of township roads.

The Federal Aviation Administration (FAA) has record of nine aviation facilities in Portage County, including six airports, two heliports, and one balloon port. The Ohio Department of Transportation (ODOT) has record of four active rail lines in Portage County, all of which are transport freight (Table 1.3). Ohio's Maritime Transportation System is comprised of 736 navigable miles of waterway in Lake Erie and Ohio River. Transit in Portage County is provided by Portage Area Regional Transportation Authority (PARTA). PARTA operates 15 fixed routes and provides Dial-A-Ride services.

4.13.3 Extent

Several factors, from mechanical failure to a collision with an animal, can cause a transportation incident. Immediate impacts of transportation emergencies can result in loss of human life or wildlife, structural damage, and disruptions in transportation system and traffic. Risk is further escalated by secondary impacts such as, fires, explosion, air pollution, and chemical incidents, that may extend beyond the site of the accident. Some of these may lead to severe impact on public and environmental health.

4.13.4 History

According to the Bureau of Transportation Statistics, the United States averaged 6,073,472 transportation accidents a year including air, highway, railroad, transit, waterborne, and pipeline accidents; and 36,626 transportation fatalities a year from 2010-2018. Fatalities in 2018 by type of transportation mode in United States and Ohio are listed in **Table 4.13.1**. Roadway crash statistics are available for Portage County as listed in **Table 4.13.2**.

A privately managed database called Plane Crash Map provides plane crash information in the United States including crashes occurred during training. They have a record of 781 fatal crashes in Ohio since 1969 of which 16 are in Portage County (**Table 4.13.3**).

Table 4.13.1: Transportation-related Fatalities by mode in United States and Ohio, 2018

Type/Measure	United States	Ohio
Air Fatalities	394	33
Water Fatalities (including recreational boating)	684	17
Highway Fatalities	36,560	1,068
Rail Fatalities	831	24
Transit Fatalities	251	2

Table 4.13.2: ODOT 5-year Crash Statistics, Portage County, 2015-2019

Year	2015	2016	2017	2018	2019
Total Crashes	4057	3954	3793	3879	3640
Total Injured	21	14	9	7	14
Total Killed	0	0	0	0	0
Animal Related	414	329	292	332	372
Bicycle Related	20	13	17	13	9
Motorcycle Related	42	60	53	54	42
Pedestrian Related	22	23	29	34	27

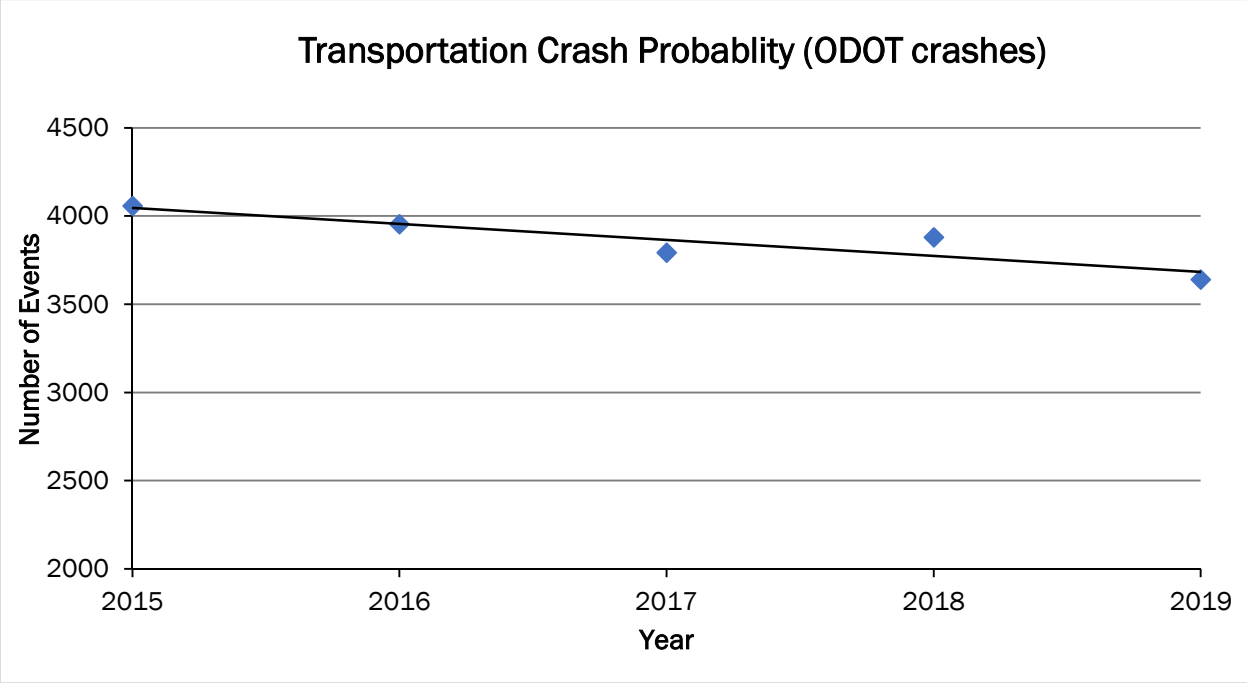
Table 4.13.3: All Plane Crashes in Portage County since 1985

Year	Nearest City	Aircraft Type	Loss of life
2018	City of Kent	Cessna 172	1 deer
2017	City of Ravenna	Piper Titan Tornado	1 fatal injury
2017	City of Ravenna	Cessna 172	No injuries
2011	City of Ravenna	Mooney M20R	3 serious injuries
2007	City of Ravenna	Beech V35B	No injuries
2007	City of Ravenna	Alon A2	2 minor injuries
2007	City of Kent	Aeronca 7AC	No injuries
2004	City of Ravenna	Cessna 421	No injuries
2002	City of Ravenna	Cessna 182Q	No injuries
2001	City of Kent	Cessna T210N	2 minor injuries
2001	City of Ravenna	Cessna 172M	No injuries
1993	City of Ravenna	Piper PA-28RT-201	1 fatal injury
1991	City of Ravenna	Piper PA-24-250	No injuries
1988	City of Ravenna	Cessna 152	No data available
1985	City of Ravenna	Piper PA28R-200	No data available
1985	City of Ravenna	Cessna T210N	No data available

4.13.5 Probability

Like other hazards, transportation events may not occur regularly, have little to no predictability, and may last a few hours. Authorities in areas with a high density of highway, air, or rail traffic should assess risks and take preventive measures accordingly. **Figure 4.13.1** shows the trend line for the number of transportation crash events per year over time. The trend line has a slightly negative slope, which indicates that the number of events is reducing over time. The Ohio Hazard Identification and Risk Assessment 2018 places transportation hazards in Ohio in the moderate to high risk zone (**Figure 4.13.2**).

Figure 4.13.1: Transportation Crash Probability

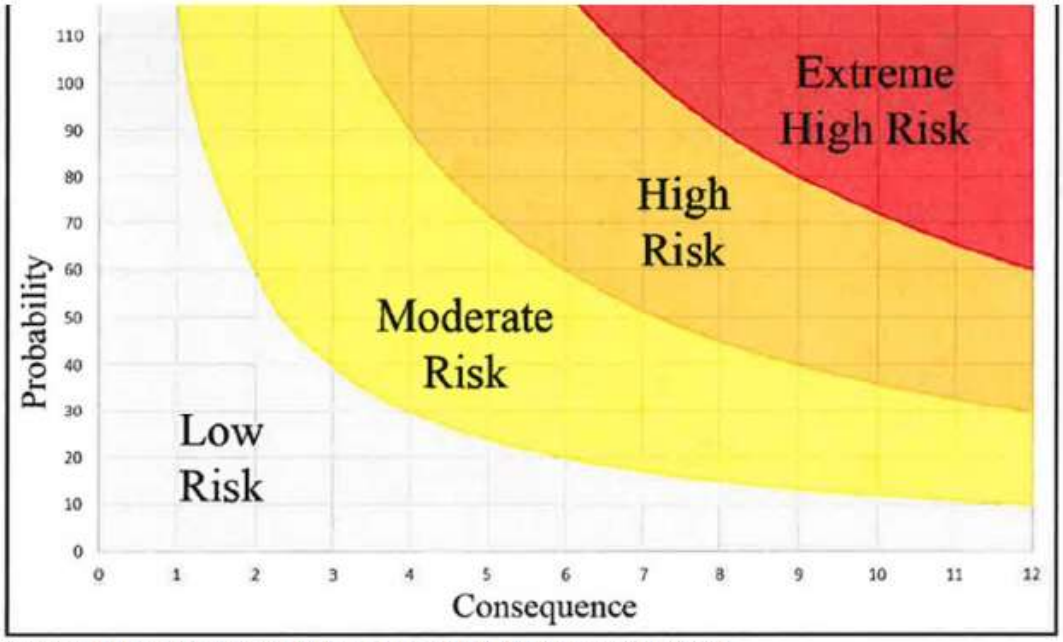


4.13.6 Vulnerability Assessment

Infrastructure Impact

Infrastructure disruption due to transportation hazards are usually due to a direct impact of the accident. Hazards are primarily linked to bridge/structure collapse, and bridges are the most common type of collapse in the State. Secondary impacts such as limited access to other infrastructure like health services as well as widespread disruptions in roadway system may be seen.

Figure 4.13.2: Total Risk Graph



Source: FEMA Critical Asset Risk Management MGT-315, October 2016

Population Impact
Transportation hazards may lead to structure failure or environmental damages through hazardous materials releases. Environmental impacts may lead to long-term consequences. Everyone within the County should be prepared, including individuals relying on these systems to get around.

Property Damage
Properties can be vulnerable to transportation incidents and crashes; especially those in proximity of the incident.

Loss of Life
Transportation incidents can result in fatalities or injuries for those on or within the immediate vicinity of an incident, and if involved in a collision. Highway accidents are the most common, however no fatalities have been recorded since 2015 in Portage County. One aircraft related fatality occurred in 2017.

Economic Losses
Transportation hazards could result in large economic impacts that extend beyond the limits of the affected area, to the connected communities including their ability to get to work and participate in local economies. Portage County has 19 transportation related critical facilities owned by the State with total value of $2,682,914, and eight noncritical facilities of total value $1,659,139.

4.13.7 Land Use and Development Trends

Availability of transportation infrastructure such as railroad and airports could make the surrounding area attractive for further development. Such land development may result in transportation hazards, for example, construction of a railroad or highway through a wooded area may result in collision with wildlife. A transportation incident could result in water or air pollution, particularly from the chemicals released during impact or combustion resulting in harm to humans, animal, and aquatic life. All land uses in proximity of transportation infrastructure are equally impacted.

4.14 Utility Failure

4.14.1 Description

Utility failure refers to the loss of electric power (blackouts), water, sewage, natural gas or other utilities. These are primarily caused by system overload or lack of updated infrastructure. Power failures are generally caused by natural events, such as severe storms, ice storms, tornadoes, and high winds. These power failures are common and cannot easily be predicted due to the random nature of storms; however, updates to infrastructure can reduce the amount and frequency of these power outages.

Portage County residents receive electric services from American Electric Power, Toledo Edison, Ohio Edison, Duke Energy, and the Illuminating Company. Natural gas is provided by Columbia Gas of Ohio, Constellation Energy, and Direct Energy. Residential internet providers include Spectrum, CenturyLink, Amplex, Viasat, Watch Communications, NKTelco, and HughesNet. Water services are provided by local water departments.

4.14.2 Location

Depending on the cause, blackouts can be isolated or countywide. Utility failures can occur in any area where the utility is provided.

4.14.3 Extent

Utility failures due to damaged infrastructure have the potential to impact large areas of the County through the loss of utilities that provide necessary services for the population. Loss of electric or gas can affect household temperatures, which can lead to severe dehydration or possibility of loss of life if outdoor temperatures are extreme. Additionally, utility failure affecting the water service has the potential to lead to contamination of the water supply.

4.14.4 History

While numerous utility failures have occurred within Portage County in the form of power outages due to severe storms, severe winter weather, or other natural hazards; widespread utility failure has not been recorded in the County. Events resulting in power outages can be referenced in the Risk Assessment sections of the appropriate hazard.

4.14.5 Probability

Utility failure does not occur at regular intervals and can be caused by human error and severe weather events. Small-scale or localized utility failures are much more likely than wide-spread or countywide utility failures.

4.14.6 Vulnerability Assessment

Infrastructure Impact

In the event of a utility failure caused by downed power lines, roads may be closed. Utility infrastructure may also suffer long-term damage as a result of such an event.

Population Impact

Extensive utility failures can threaten the health and safety of the public. During extreme temperature events, the impacts on residents are heightened. Loss of utilities that provide air conditional or heat can create a safety hazard, especially for children and older populations. The County and/or communities should have a plan in place for how to notify and assist residents in case of utility failure.

Property Damage
Direct damage to property may result directly from downed power lines. Fires may also occur because of downed power lines.

Loss of Life
Loss of life from the loss of electricity can occur. Those who depend on electricity for necessary medical treatment are at risk. Critical facilities such as hospitals and nursing homes should be prepared in the event of a utility failure, as they manage sensitive populations that may be reliant on utilities. Downed power lines can also lead unsafe environments with live electric lines that have the potential to lead to loss of life.

Economic Losses
Blackouts are often caused by systems that are aging and deteriorating, and updates to these systems may require additional funds. Economic loss can occur because of reduced commercial activity. Goods that need electricity or other utilities for preservation may also be lost. If widespread blackouts occur, people may not be able to work, and wages or income may be lost as a result.

4.14.7 Land Use and Development Trends
All properties are at risk to utility failures. Utility failure can impact any development, including future development.

4.15 Wildfire

4.15.1 Description

A wildfire is a fire in an area of combustible vegetation that occurs in the countryside or rural area. The Ohio Department of Natural Resources identifies Ohio's wildfire seasons as occurring primarily in the spring (March, April, and May) before vegetation has "greened-up" and in the fall (October and November) when leaf drop occurs. During these times and especially when weather conditions are warm, windy and with low humidity, cured vegetation is particularly susceptible to burning. Fuel (vegetation, woody debris), weather (wind, temperature, humidity) and topography (hills and valleys) can combine to present an extreme danger to unwary civilians and firefighters in the path of a wildfire. Each year an average of 1,000 wildfires burn 4,000 to 6,000 acres of forest and grassland within Ohio's forest fire protection district, which corresponds mostly to the state's unglaciated hill country

4.15.2 Location

Wildfires can occur anywhere within the County where there is enough vegetation that is susceptible to drought and burning. However, the Ohio Department of Natural Resources considers Portage County to be at low risk for wildfires (**Figure 4.15.1**).

4.15.3 Extent

Several factors can contribute to the escalation of risk of wildfires, including the prevalence of forests and agricultural lands and their close proximity to homes, residences, and structures, as well as the distance between fire and emergency management services. In these cases, presence of fire near structures causes fire departments to shift focus away from fire suppression and towards structure protection.

According to the State of Ohio Hazard Mitigation Plan (SOHP), 99.9 percent of wildfires in Ohio are caused by human action or accident. As such, many wildfires in the State burn into close proximity of homes and structures. From 1997 to 2007, the main causes of wildfire in Ohio included debris burning, incendiary (arson), equipment, smoking, campfires, children (playing with matches), lightning, and railroad.

4.15.4 History

The *SOHMP* identifies 113 total fire events from January 1, 2007 to December 31, 2017, which averaged to ten events annually. These events burned a total of 389 acres total. 105 of these events (92.92%) burnt less than ten acres of land.

Estimating the monetary losses associated with wildfires is difficult due the fact that most of these events occur in open land or fields, with monetary losses often not being recorded. This lack of data may result in inconsistencies if an analysis was done based on reported monetary loss. As such, acres burned per fire event is a more consistent method of analysis for this hazard.

4.15.5 Probability

According to the SOHP, there is a 100 percent probability that a wildfire will occur within any county in any given year. Since 113 total fire events occurred in Portage County between 1/1/2007 to 12/31/2017, an average of 11 fire events are estimated to occur annually in the County.

4.15.6 Vulnerability Assessment

Infrastructure Impact

There is low risk that wildfire in Portage County will impact infrastructure. Wildfire will most likely impact the County through property and crop damage.

Population Impact

There is low risk of wildfire in Portage County. Accordingly, there is low risk of impact to the population. If wildfire would occur within the County, the population could be impacted by loss of homes and crops.

Property Damage

As there were 113 recorded wildfire events in Portage County's recent history, it is currently estimated that the County has experienced some property and crop damage as result of wildfires. Occasionally, in the event of wildfire event, fire engines belonging to local fire departments are damaged while suppressing wildfires. Wildfire suppression has resulted in a great amount of personal property being saved by fire departments.

Due to the non-site-specific nature of this hazard, **Table 4.15.1** lists all structures within Portage County as having potential impacts from Wildfires. It also provides values for two worst-case scenarios valued at one percent damage and five percent damage.

Loss of Life

Portage County has no recorded wildfire events resulting in loss of life. Because of this, it is unlikely that loss of life will result from wildfire; however, with any wildfire event, there is potential for loss of life. Advanced evacuation warnings can reduce the likelihood of death as a result of wildfire.

Economic Losses

Wildfire has the potential to damage agricultural crops and tree plantations, which can result in economic losses. Potential economic losses and damages associated with Portage County structures and potential worst-case scenarios are recorded in **Table 4.15.1**, below.

Figure 4.15.1: ODNR Division of Forestry Wildfire Hazard Level

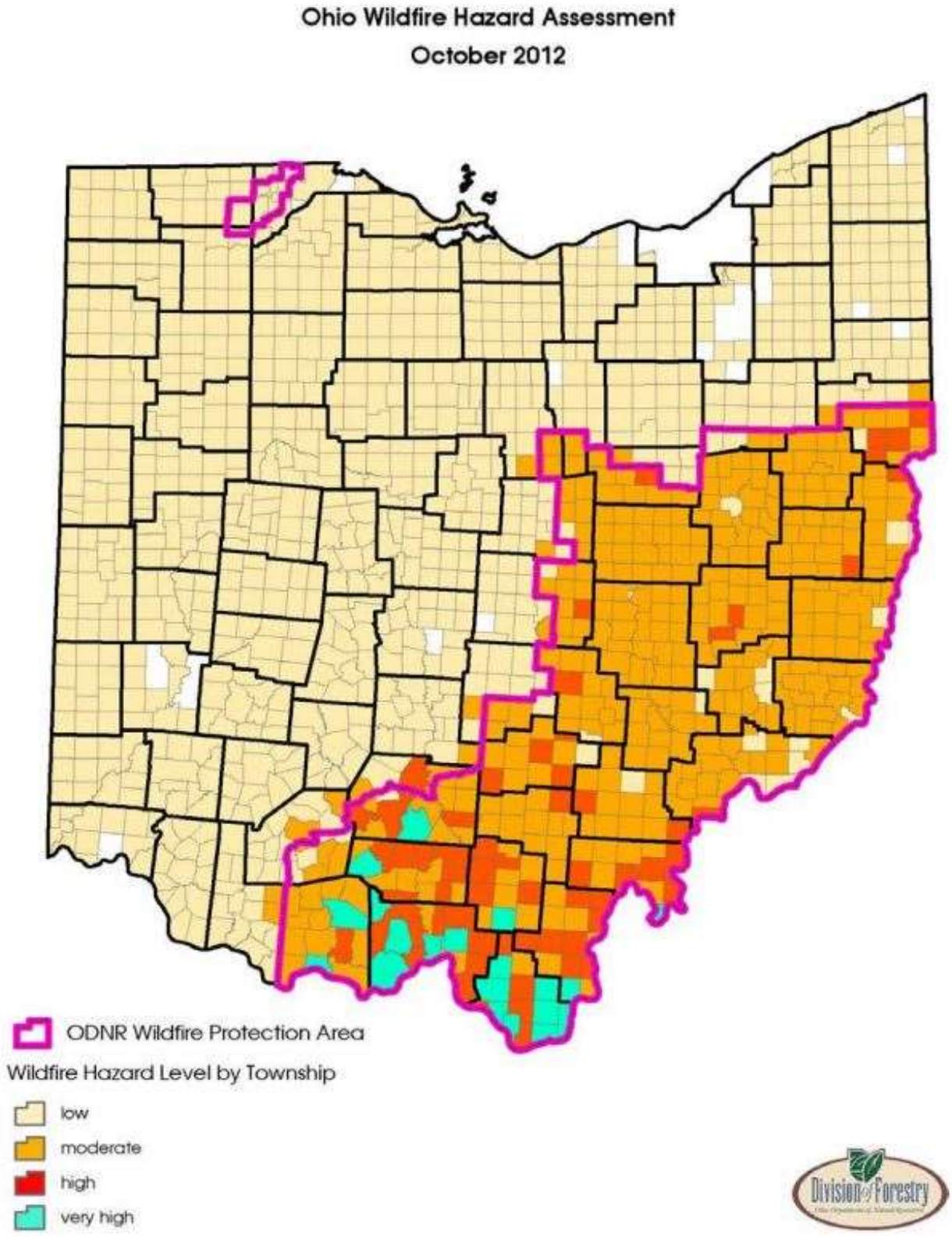


Table 4.15.1: Structure Vulnerability from Wildfires

Structure Type	Number of Properties Exposed	Total Value of Structures	Damage for 1% Scenario	Damage for 5% Scenario
Residential	80,297	$920,299,440	$2,677,260,670	$3,597,560,110
Non-Residential	19,542	$717,360,570	$2,965,010,620	$3,682,371,190
Critical Facilities	*3,459*	*$145,643,170*	*$1,917,178,810*	*$2,062,821,980*
Total	99,839	$1,637,660,010	$5,642,271,290	$7,279,931,300

4.15.7 Land Use and Development Trends

There are no likely land use and development issues related to wildfires.

5 | Hazard Mitigation

5.1 Hazard Mitigation Strategy

Each potential hazard, including natural, geological, and human-caused hazards, were rated by members of the Core Planning Committee, which included representatives from each jurisdiction in Portage County. Each potential hazard was rated on a scale of zero to five, with zero indicating the hazard should not be studied and five indicating the most significant threat to the representative's community. **Table 5.1** displays the average of the representatives' ratings as a Priority Score for each hazard. The hazard that scored the highest (Flooding, 4.17), was given a Hazard Rank of one. The mitigation goals follow the ranking of hazards as established by the representatives of the participating jurisdictions. Hazards that received the same priority score (hazardous materials/terrorism and dam failure/transportation) were discussed at the second Planning Meeting. Ties were broken based on feedback from the Portage County EMA and stakeholders attending the meeting.

Terrorism as a whole is considered a lower-priority hazard than Active Shooters (rank 6), according to Ryan Shackelford of the Portage County EMA. For the purpose of the risk assessments in this Plan, Active Shooters are grouped in with other forms of Terrorism.

Table 5.1: Hazard Priorities

Hazard	Priority Score	Hazard Rank
Flooding	4.17	1
Utility Failure	3.75	2
Tornadoes	3.58	3
Severe Summer Weather	3.46	4
Hazardous Materials	3.42	5
Active Aggressor/Terrorism	3.42	6
Severe Winter Weather	3.35	7
Epidemic/Pandemic	2.92	8
Dam Failure	2.50	9
Transportation	2.50	10
Drought & Extreme Heat	2.46	11
Invasive Species	2.00	12
Landslides, Erosion & Mine Subsidence	1.83	13
Earthquakes	1.38	14
Wildfires	1.25	15

Coastal erosion and hurricanes/tropical storms are hazards that are not applicable to Portage County and were not assessed; however, if remnants of hurricanes or tropical storms were experienced as thunderstorms, thunderstorm winds, or high/severe winds, those events were included in the severe summer weather and/or severe wind and tornadoes assessments. Two new hazards were included in this Plan that were not included in the 2015 Plan. These hazards include wildfires, and landslides, erosion, and mine subsidence.

Mitigation projects will only be implemented if the benefits outweigh the associated cost of the proposed project. The Core Planning Committee, in coordination with the Portage County Emergency Management Agency, performed a general assessment of each action that would require FEMA funding as part of the planning process. A detailed cost-benefit analysis of each mitigation action will be required during the project planning phase in order to determine the economic feasibility of each action. Projects will also be evaluated for social and environmental impact-related feasibility, as well as technical feasibility and any other criteria that evaluate project effectiveness. This evaluation of each project will be performed during the pre-application phase of a grant request. Project implementation will be subject to the availability of FEMA grants and other funding sources, as well as local resources.

Projects that are determined to be infeasible during this review process will be re-evaluated by members of the Core Planning Committee for re-scheduling or deletion.

5.2 Hazard Mitigation Goals and Mitigation Actions

Developing achievable goals forms the foundation for all mitigation actions and activities that will aid Portage County in attaining the overall mission of the Core Planning Committee. As such, the Core Planning Committee assessed the goals of the 2015 Portage County Hazard Mitigation Plan and had the opportunity to develop new goals for the 2021 update. Goals were reviewed and established based upon their relationship to the potential adverse impact upon the community.

The goals, as well as the hazards assessed for this Plan, informed the development of actions that the County and participating jurisdictions can take to mitigate the impacts of each of the hazards. The goals of the 2021 Portage County Hazard Mitigation Plan are as follows:

- **Goal 1:** Ensure countywide implementation of the National Incident Management System (NIMS).
- **Goal 2:** Ensure smooth transition from a local emergency to a state- and federally-declared disaster.
- **Goal 3:** Coordinate local mitigation efforts in Portage County to lessen risk from hazards profiled in this Plan.
- **Goal 4:** Ensure good disaster communications.
- **Goal 5:** Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

5.3 Hazard Mitigation Action Priority

Members of the Core Planning Committee completed a Previous Mitigation Action Status survey, which indicated the status of mitigation actions included in the 2015 Hazard Mitigation Plan. This survey asked representatives to indicate whether the mitigation action from the previous plan was completed, deleted, deferred, unchanged, or ongoing. It also asked the representative if the action should be included in the updated Plan.

Once all mitigation actions from the previous plan were reviewed and their status indicated (**Appendix B**), all mitigation actions for the 2021 Portage County Hazard Mitigation Plan were reviewed and rated on a scale of one to five by members of the Core Planning Committee based on the several criteria, including whether the action was cost-effective, technically feasible, environmentally sound, needed immediately, and the action's total risk reduction.
All of the surveys collected were tabulated to develop a raw score for each individual mitigation action. These scores are included in the Mitigation Action Scoring Matrix in Appendix C. Overall, the raw score was determined by two factors:

1. The rankings of the hazard, as determined by the Hazard Priority Survey (**Table 5.1**, above).
2. The ratings received from the Core Planning Committee and the public on each of the mitigation actions.

The raw scores were then ranked, and each mitigation action was assigned a priority number to indicate the importance of that specific action, according to the survey responses. The lower the action priority, the higher the priority. For example, an action assigned a priority of "1" should be prioritized higher than an action assigned a priority score of "5". All mitigation actions are organized first in order of hazard priority and then in order of action priority. Any ties that were generated after survey tabulation were broken by the Portage County EMA Director.

Hazard mitigation action priorities are organized by community and hazard in **Tables 5.2** on the following pages. The information used to develop the priorities can be found in the Matrix Scoring Spreadsheet, which is located in **Appendix C**. Comments from the jurisdictions responsible for each action can be found in **Appendix G**, along with all completed surveys that were used to make **Table 5.2**.

Table 5.2: Mitigation Actions Priority Table by Community

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
Portage County							
1	1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; 30%
1	2	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	3	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; 80%
1	4	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; 5%
1	5	Multiple Hazards	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	6	Multiple Hazards	Revisit emergency support functions update needs list and provide documentation.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	7	Multiple Hazards	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Unchanged

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
1	8	Multiple Hazards	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	9	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	10	Multiple Hazards	Continue to push information on new emergency communications onto social media.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	11	Multiple Hazards	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	12	Multiple Hazards	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/Village during emergencies.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	13	Multiple Hazards	Continue damage assessment training throughout the County and provide documentation.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
1	14	Multiple Hazards	Adopt the International Building Code and International Residential Code.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	15	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	16	Multiple Hazards	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	17	Multiple Hazards	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	18	Multiple Hazards	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
1	19	Multiple Hazards	Perform a countywide sustainability study to draft long-term goals and document strategies related to combating climate change in the County to reduce greenhouse gas (GHG) emissions.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New
1	20	Multiple Hazards	Engage necessary stakeholders to review Portage County's overall mission to limit greenhouse gas emissions through current standards, renovations and new construction or other green initiatives.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	21	Multiple Hazards	Consider including green design standards in building codes.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	22	Multiple Hazards	Identify areas in permitting processes that can be sped up for projects that meet certain environmental standards (green tape).	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
1	23	Multiple Hazards	Perform a countywide food system security study and draft a plan to improve local food access during hazard events.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
1	24	Multiple Hazards	Work with the Ohio EPA and to identify GHG emissions at the County level.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	1	Flooding	Encourage/assist the Village of Windham to join the NFIP.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
2	2	Flooding	Enhance wetland buffer requirements to help protect water quality.	Portage County Water Resources	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	3	Flooding	Fix storm pipes to improve stormwater management.	Portage County Storm Water Management	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	New
2	4	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Portage County OHS/EM	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	Ongoing; as necessary.
2	5	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	Portage County Storm Water Management	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	Ongoing
2	6	Flooding	Complete a stormwater drainage study for known problem areas.	Portage County Storm Water Management	United States Army Corps of Engineers (USACE) Flood Control Program	1/1/2021 - 12/31/2025	New
2	7	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; as incidents occur

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	8	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	9	Flooding	Require that floodplains be kept as open space.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
2	10	Flooding	Clean and maintain ditches according to the determined cause.	Portage County Storm Water Management	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	Ongoing
2	11	Flooding	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
2	12	Flooding	Implement corrective measures identified in the above actions.	Portage County OHS/EM	United States Army Corps of Engineers (USACE) Flood Control Program	1/1/2021 - 12/31/2025	Ongoing
2	13	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	Portage County Storm Water Management	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	14	Flooding	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
2	15	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	16	Flooding	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	Portage County Storm Water Management	General Operating Budget	1/1/2021 - 12/31/2025	New
2	17	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Portage County Storm Water Management	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	18	Flooding	Raise roadway profiles above flood elevation.	Portage County Engineer	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	19	Flooding	Retrofit properties that suffer from frequent flash flooding utilizing available stormwater management techniques.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
2	20	Flooding	Identify ditches that can be dredged or treated with netting and other filtration systems to limit dirt flow, debris blockage and flooding.	Portage County Storm Water Management	General Operating Budget	1/1/2021 - 12/31/2025	New
3	1	Utility Failure	Purchase and install backup generators for public buildings and critical facilities.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	Capital Improvement Budgets	1/1/2021 - 12/31/2025	New
4	1	Tornadoes	Install residential & community safe rooms.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
4	2	Tornadoes	Require construction of safe rooms in new schools, daycares, and nursing homes.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
4	3	Tornadoes	Conduct tornado drills in public buildings.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
4	4	Tornadoes	Distribute tornado shelter location information.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
4	5	Tornadoes	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
5	1	Severe Summer Weather	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
5	2	Severe Summer Weather	Install and maintain surge protection on critical electronic equipment.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	New
5	3	Severe Summer Weather	Post warning signs at local parks, county fairs, and other outdoor areas.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
5	4	Severe Summer Weather	Convert traffic lights to mast arms.	Portage County Engineer	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
5	5	Severe Summer Weather	Provide informational packets (paper or digital) on micro and macro bursts to the public.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
6	1	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
6	2	Hazardous Materials	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
6	3	Hazardous Materials	Review and update County Commodity Flow Study.	Portage County OHS/EM	Hazardous Materials Emergency Planning Grant (HMEP)	1/1/2021 - 12/31/2025	New
6	4	Hazardous Materials	Create a radiological emergency plan for areas within a 50-mile radius of a nuclear powerplant.	Portage County OHS/EM	Hazardous Materials Emergency Planning Grant (HMEP)	1/1/2021 - 12/31/2025	New
7	1	Active Aggressor/ Terrorism	Work with local and State law enforcement officials to identify risk areas in the County.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
7	2	Active Aggressor/ Terrorism	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
7	3	Active Aggressor/ Terrorism	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
7	4	Active Aggressor/ Terrorism	Cybersecurity: Install server redundancies for public IT infrastructure.	Portage County OHS/EM	Capital Improvement Budgets	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
8	1	Severe Winter Weather	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	Portage County Health District	General Operating Budget	1/1/2021 - 12/31/2025	New
8	2	Severe Winter Weather	Plan for and maintain adequate road and debris clearing capabilities.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
8	3	Severe Winter Weather	Ensure the development and enforcement of building codes for roof snow loads.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
8	4	Severe Winter Weather	Use snow fences or “living snow fences” (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
8	5	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
8	6	Severe Winter Weather	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
9	1	Epidemic	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	Portage County Health District	General Operating Budget	1/1/2021 - 12/31/2025	New
10	1	Dam Failure	Obtain inundation mapping for high hazard potential dams.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
10	2	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Unchanged
10	3	Dam Failure	Rehabilitate high hazard potential dams.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
11	1	Transportation	Complete a full transportation study to identify risk areas and transportation behaviors.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New
11	2	Transportation	Improve public transportation and overall transportation access.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New
12	1	Drought & Extreme Heat	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	Portage County Building Department and Flood Plain Administration	Capital Improvement Budgets	1/1/2021 - 12/31/2025	New
12	2	Drought & Extreme Heat	Encourage or mandate the use of local plants on public property (xeriscaping).	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
12	3	Drought & Extreme Heat	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
12	4	Drought & Extreme Heat	Develop of list of criteria that triggers drought-related activities when met.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
13	1	Invasive Species	Complete an ecological and economic impact study for local and nearby invasive species.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New
14	1	Landslides, Erosion & Mine Subsidence	Limit or prevent development in identified risk areas.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
14	2	Landslides, Erosion & Mine Subsidence	Compile a complete list of any underground mines in the County.	Portage County Engineer	General Operating Budget	1/1/2021 - 12/31/2025	New
14	3	Landslides, Erosion & Mine Subsidence	Use GIS to identify and map landslide risk areas.	Portage County GIS	General Operating Budget	1/1/2021 - 12/31/2025	New
14	4	Landslides, Erosion & Mine Subsidence	Acquire and demolish or relocate at-risk properties and infrastructure.	Portage County OHS/EM	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	New
14	5	Landslides, Erosion & Mine Subsidence	Work with local representatives to map the locations of abandoned mines.	Portage County GIS	General Operating Budget	1/1/2021 - 12/31/2025	New
14	6	Landslides, Erosion & Mine Subsidence	Digitize old mine maps.	Portage County GIS	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
14	7	Landslides, Erosion & Mine Subsidence	Confirm the locations of mines from old mine maps.	Portage County GIS	General Operating Budget	1/1/2021 - 12/31/2025	New
14	8	Landslides, Erosion & Mine Subsidence	Consider buying out, demolishing, and relocating properties built on top of abandoned mines.	Portage County OHS/EM	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	New
14	9	Landslides, Erosion & Mine Subsidence	Provide ODNR with updated abandoned mine locations.	Portage County GIS	General Operating Budget	1/1/2021 - 12/31/2025	New
15	1	Earthquakes	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
16	1	Wildfire	Routinely inspect the functionality of fire hydrants and provide documentation.	Local Fire Departments	General Operating Budget	1/1/2021 - 12/31/2025	New
16	2	Wildfire	Ensure that buildings have fire extinguishers and fire detectors installed.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
16	3	Wildfire	Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New
16	4	Wildfire	Develop a vegetation management plan to reduce wildfire risk.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
City of Aurora							
2	1	Flooding	Purchase remaining homes in Geauga Lake's 100-year floodplain.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	2	Flooding	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	3	Flooding	Install stormwater BMPs to assist with stormwater management in Geauga Lake low lying area	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
City of Kent							
1	1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; 30%
1	2	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	3	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; 80%
1	4	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; 5%
1	5	Multiple Hazards	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	6	Multiple Hazards	Revisit emergency support functions update needs list and provide documentation.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
1	7	Multiple Hazards	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Unchanged
1	8	Multiple Hazards	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	9	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	10	Multiple Hazards	Continue to push information on new emergency communications onto social media.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	11	Multiple Hazards	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	12	Multiple Hazards	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	13	Multiple Hazards	Continue damage assessment training throughout the County and provide documentation.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
1	14	Multiple Hazards	Adopt the International Building Code and International Residential Code.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	15	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
1	16	Multiple Hazards	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	17	Multiple Hazards	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
1	18	Multiple Hazards	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	1	Flooding	Enhance wetland buffer requirements to help protect water quality.	Portage County Water Resources	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	2	Flooding	Fix storm pipes to improve stormwater management.	Portage County Storm Water Management/ Engineer	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	New
2	3	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Portage County OHS/EM	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	Ongoing; as necessary.
2	4	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	Portage County Storm Water Management/ Engineer	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	Ongoing
2	5	Flooding	Complete a stormwater drainage study for known problem areas.	Portage County Storm Water Management/ Engineer	United States Army Corps of Engineers (USACE) Flood Control Program	1/1/2021 - 12/31/2025	New
2	6	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing; as incidents occur
2	7	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	8	Flooding	Require that floodplains be kept as open space.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
2	9	Flooding	Clean and maintain ditches according to the determined cause.	Portage County Storm Water Management/ Engineer	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	Ongoing
2	10	Flooding	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
2	11	Flooding	Implement corrective measures identified in the above actions.	Portage County OHS/EM	United States Army Corps of Engineers (USACE) Flood Control Program	1/1/2021 - 12/31/2025	Ongoing
2	12	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	Portage County Storm Water Management/ Engineer	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	13	Flooding	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	14	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/ demolitions of affected structures, relocation, and water course).	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	15	Flooding	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	Portage County Storm Water Management/ EMA Director	General Operating Budget	1/1/2021 - 12/31/2025	New
2	16	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Portage County Storm Water Management	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	17	Flooding	Raise roadway profiles above flood elevation.	Portage County Engineer	United States Army Corps of Engineers (USACE) Ohio Environmental Infrastructure Program	1/1/2021 - 12/31/2025	New
3	1	Utility Failure	Insure BDAs are installed in larger buildings to increase radio signal for first responders (repeaters).	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
3	2	Utility Failure	Purchase and install backup generators for public buildings and critical facilities.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	Capital Improvement Budgets	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
4	1	Tornadoes	Conduct tornado drills in public buildings.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
4	2	Tornadoes	Distribute tornado shelter location information.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
4	3	Tornadoes	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
5	1	Severe Summer Weather	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
5	2	Severe Summer Weather	Install and maintain surge protection on critical electronic equipment.	Portage County OHS/EM, Mayor/ Administrator of Jurisdiction	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	New
5	3	Severe Summer Weather	Post warning signs at local parks, county fairs, and other outdoor areas.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
5	4	Severe Summer Weather	Convert traffic lights to mast arms.	Mayor/ Administrator of Jurisdiction	Emergency Management Performance Grant (EMPG) Special Project Grants	1/1/2021 - 12/31/2025	New
6	1	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
6	2	Hazardous Materials	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
6	3	Hazardous Materials	Review and update County Commodity Flow Study.	Portage County OHS/EM	Hazardous Materials Emergency Planning Grant (HMEP)	1/1/2021 - 12/31/2025	New
7	1	Active Aggressor/ Terrorism	Work with local and State law enforcement officials to identify risk areas in the County.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
7	2	Active Aggressor/ Terrorism	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
7	3	Active Aggressor/ Terrorism	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
8	1	Severe Winter Weather	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	Portage County Health District	General Operating Budget	1/1/2021 - 12/31/2025	New
8	2	Severe Winter Weather	Plan for and maintain adequate road and debris clearing capabilities.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
8	3	Severe Winter Weather	Ensure the development and enforcement of building codes for roof snow loads.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
8	4	Severe Winter Weather	Use snow fences or "living snow fences" (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
8	5	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	Portage County Engineer	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
8	6	Severe Winter Weather	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
9	1	Epidemic	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	Portage County Health District	General Operating Budget	1/1/2021 - 12/31/2025	New
10	1	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	Unchanged
11	1	Transportation	Complete a full transportation study to identify risk areas and transportation behaviors.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
12	1	Drought & Extreme Heat	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	Portage County Building Department and Flood Plain Administration	Capital Improvement Budgets	1/1/2021 - 12/31/2025	New
12	2	Drought & Extreme Heat	Encourage or mandate the use of local plants on public property (xeriscaping).	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New
12	3	Drought & Extreme Heat	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
12	4	Drought & Extreme Heat	Develop of list of criteria that triggers drought-related activities when met.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
13	1	Invasive Species	Complete an ecological and economic impact study for local and nearby invasive species.	Portage County Regional Planning Commission	General Operating Budget	1/1/2021 - 12/31/2025	New
14	1	Landslides, Erosion & Mine Subsidence	Limit or prevent development in identified risk areas.	Portage County Building Department and Flood Plain Administration	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
14	2	Landslides, Erosion & Mine Subsidence	Compile a complete list of any underground mines in the County.	Portage County RPC	General Operating Budget	1/1/2021 - 12/31/2025	New
14	3	Landslides, Erosion & Mine Subsidence	Use GIS to identify and map landslide risk areas.	Portage County GIS	General Operating Budget	1/1/2021 - 12/31/2025	New
15	1	Earthquakes	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
16	1	Wildfire	Routinely inspect the functionality of fire hydrants and provide documentation.	Local Fire Departments	General Operating Budget	1/1/2021 - 12/31/2025	New
16	2	Wildfire	Ensure that buildings have fire extinguishers and fire detectors installed.	Portage County OHS/EM	General Operating Budget	1/1/2021 - 12/31/2025	New
City of Ravenna							
2	1	Flooding	Resilient infrastructure wastewater/stormwater retention basin project design.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
2	2	Flooding	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	3	Flooding	Purchase and install four generators and the critical lift stations.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
2	4	Flooding	Purchase a mid-sized track excavator to maintain the ditches and streams within city limits and replace undersized storm pipe.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	5	Flooding	Hire an engineering firm to study a nearly 300 acre drainage course to determine how best to drain area through a swampy wet area with a pond in the middle.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
City of Streetsboro							
2	1	Flooding	Continue to evaluate Engineering and other flood control options for Tinkers creek and flooding on SR-303.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
7	2	Active Aggressor/ Terrorism	Continue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the village and off-site community partners.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
Village of Garrettsville							
2	1	Flooding	Review the potential of flood retrofitting and/or acquisition and demolition of the current Fire Station within a FEMA Floodplain of Eagle Creek due to repetitive flooding of the station and impacts to first response apparatus.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
2	2	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
2	3	Flooding	Evaluate engineering options and/or the removal of a dam to limit flooding along Eagle Creek in the Village.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
Village of Hiram							
1	1	Multiple Hazards	Continue to maintain and enhance outdoor warning capabilities for tornados and severe weather events.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
1	2	Multiple Hazards	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
2	1	Flooding	Review engineering studies and stormwater capacities to develop plans to address flooding concerns on Hinsdale street.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
3	1	Utility Failure	Work to enact a tree management program and/or contractor to limit utility disruptions and impacts to people and property during high wind events.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
7	1	Active Aggressor/ Terrorism	Continue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the village and off-site community partners.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
Village of Mantua							
2	1	Flooding	Review the potential and enact flood retrofitting and/or acquisition and demolition of businesses/ property within a FEMA Floodplain along the Cuyahoga River subject to repetitive flooding.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
2	2	Flooding	Enhance wetland buffer requirements in order to help protect water quality.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
Village of Sugar Bush Knolls							
1	1	Multiple Hazards	Work with the Portage County OHS/EM to enact the damage assessment software solution and disaster recovery education to ensure effective transition from response and recovery and maximize local, state, and federal programs for residents of the Village.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
1	2	Multiple Hazards	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing

Hazard Priority	Action Priority	Hazard	Mitigation Action	Lead Agency	Funding Source	Start/End	Status
1	3	Multiple Hazards	Increase road weight capacity to withstand first response vehicles and increase dry well capacities for first responders responding to the Village.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
3	1	Utility Failure	Work to enact a tree management program and/or contractor to limit utility disruptions and impacts to people and property during high wind events.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
Village of Windham							
2	1	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	Ongoing
4	1	Tornadoes	Collaborate with local, county and state partners for the feasibility and construction of a community tornado safe shelter for Windham Village.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New
7	1	Active Aggressor/ Terrorism	Continue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the village and off-site community partners.	Mayor/ Administrator of Jurisdiction	General Operating Budget	1/1/2021 - 12/31/2025	New

6 | Schedule and Maintenance

6.1 Participation Overview

The 2021 Portage County Hazard Mitigation Plan will be adopted by all jurisdictions in Portage County, including the County, all townships, and the cities and villages. After the jurisdictions have adopted the plan, their signed resolutions or ordinances will be added to the plan as an Appendix.

6.2 Continued Public Involvement

The public will continue to be able to provide feedback on the Plan, as the Plan will be available through the Portage County Emergency Management Agency and Ohio Emergency Management Agency websites. The Portage County Emergency Management Agency will provide access to the Plan to all County, municipality, and township offices, and will make the Plan available in hardcopy and electronic format to the public as appropriate. The Portage County Emergency Management Agency will post notices of any meetings for updating and evaluating the Plan, using the usual methods for posting meeting announcements in the County to invite the public to participate. All meetings will be open to the general public. The Portage County Emergency Management Agency will publicly announce the mitigation action items that are slated for development in the current year, as well as any updates to the Plan as part of the annual review process.

6.3 Plan Integration and Annual Review

6.3.1 Previous Integration Efforts

The Portage County Emergency Management Agency and Local Emergency Planning Committee (LEPC) have worked to integrate the previous Hazard Mitigation Plan into planning processes in the County. Members of the Core Planning Committee indicated that they have pursued planning efforts associated with previous mitigation actions and integration into other planning efforts. These efforts include but are not limited to:

- Convening regular planning meetings for the emergency support functions undergoing an update;
- Completion of a Commodity Flow Study (2017);
- Asset Mapping undertaken by the Portage County Regional Planning Commission, Portage County Auditor, and Information Technology Departments to provide important knowledge about the County's land uses;
- Integration of flood hazard considerations in to the 2017 City of Aurora Master Plan; and,
- Updating the Portage County Storm Water Management Program in December 2016.

6.3.2 Future Integration Efforts

Local government plays a major role in the execution and implementation of mitigation strategies. This happens in large part during the daily operations that guide the development of various communities in the County. As such, each community will be responsible for understanding which items they are accountable for implementing. The Core Planning Committee may meet annually in order to monitor and evaluate the Portage County Hazard Mitigation Plan. During the annual meeting, a status update should be provided for each mitigation action by the responsible agency.

All participating jurisdictions will be encouraged to attend this yearly plan update meeting. The meeting will coincide with the budget process so that future funding sources can be determined and set aside for actions slated for that particular year. This meeting will also be available to the public. Additionally, each jurisdiction and the County will review the Hazard Mitigation Plan during other planning processes, such as development of comprehensive plans or capital improvement plans and incorporate appropriate goals and mitigation actions into such documents.

Furthermore, the County and its participating jurisdictions will make a concerted effort to integrate the hazard mitigation plan and its mitigation actions into existing plans and regulations, such as comprehensive plans, subdivision regulations, zoning resolutions, zoning maps, parks and open space plans, and emergency operations plans. To assist in this, the County is exploring hiring a consultant to coordinate a Plan for integration. Consideration will be given as to how projects included in this Hazard Mitigation Plan can contribute towards goals and objectives of other planning efforts at a County and municipal level.

6.4 Updating the Plan

The Plan must be updated within five years and re-adopted by the County and all participating jurisdictions in order to maintain compliance with federal regulations and ensure eligibility for certain federal mitigation grant funds. The Portage County Emergency Management Agency will identify any necessary modifications to the Plan, including changes in mitigation goals and actions that should be incorporated into the next update. The Portage County Emergency Management Agency Director and the County Commissioners will initiate the process of updating the plan in accordance with federal guidelines in sufficient time to meet state and federal deadlines.

Appendices

Appendix A | Historical Hazard Events

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Drought & Extreme Heat	Drought	9/1/1999	N/A	0	0	$0	$4,000,000
Drought & Extreme Heat	Drought	8/1/1999	N/A	0	0	$0	$0
Drought & Extreme Heat	Drought	7/1/1999	N/A	0	0	$0	$0
Drought & Extreme Heat	Drought	6/1/1999	N/A	0	0	$0	$0
Drought & Extreme Heat	Drought	8/1/1996	N/A	0	0	$0	$0
Flash Flooding	Flash Flood	6/27/2019	N/A	0	0	$100,000	$0
Flash Flooding	Flash Flood	6/5/2019	N/A	0	0	$30,000	$0
Flash Flooding	Flash Flood	5/12/2014	N/A	0	0	$30,000	$0
Flash Flooding	Flash Flood	7/10/2013	N/A	0	0	$2,400,000	$0
Flash Flooding	Flash Flood	7/10/2013	N/A	0	0	$90,000	$0
Flash Flooding	Flash Flood	7/10/2013	N/A	0	0	$10,000	$0
Flash Flooding	Flash Flood	5/14/2011	N/A	0	0	$0	$0
Flash Flooding	Flash Flood	6/22/2006	N/A	0	0	$1,000,000	$0
Flash Flooding	Flash Flood	5/22/2004	N/A	0	0	$2,400,000	$0
Flash Flooding	Flash Flood	7/27/2003	N/A	0	0	$500,000	$0
Flash Flooding	Flash Flood	7/23/2003	N/A	0	0	$500,000	$0
Flash Flooding	Flash Flood	7/22/2003	N/A	0	0	$250,000	$0
Flash Flooding	Flash Flood	7/21/2003	N/A	0	0	$20,000,000	$0
Flash Flooding	Flash Flood	7/7/2003	N/A	0	0	$200,000	$0
Flash Flooding	Flash Flood	1/9/1998	N/A	0	0	$15,000	$0
Flash Flooding	Flash Flood	7/24/1997	N/A	0	0	$30,000	$0
Flash Flooding	Flash Flood	7/24/1997	N/A	0	0	$5,000	$0
Flash Flooding	Flash Flood	6/1/1997	N/A	0	0	$40,000	$20,000
Flash Flooding	Flash Flood	6/14/1996	N/A	0	0	$20,000	$0
Flash Flooding	Flash Flood	5/11/1996	N/A	0	0	$60,000	$0
Flash Flooding	Flash Flood	4/23/1996	N/A	0	0	$0	$0
Flooding	Flood	1/12/2017	N/A	0	0	$5,000	$0
Flooding	Flood	9/10/2011	N/A	0	0	$500	$0
Flooding	Flood	5/24/2011	N/A	0	0	$0	$0
Flooding	Flood	8/30/2005	N/A	0	0	$325,000	$0
Flooding	Flood	8/5/2005	N/A	0	0	$75,000	$0
Flooding	Flood	1/1/2005	N/A	0	0	$400,000	$0
Flooding	Flood	8/27/2003	N/A	0	0	$75,000	$0
Severe Summer Weather	Thunderstorm Wind	4/7/2020	50 MPH	0	0	$0	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	High Wind	1/12/2020	50 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	12/30/2019	52 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/18/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/18/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/18/2019	52 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	8/17/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/17/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/6/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/6/2019	52 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	56 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	60 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/28/2019	52 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	6/5/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/28/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	4/14/2019	52 MPH	0	0	$2,000	$0
Severe Summer Weather	High Wind	2/24/2019	50 MPH	0	0	$60,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$1,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	5/22/2018	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/4/2018	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/4/2018	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/4/2018	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	4/27/2018	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	11/5/2017	91 MPH	0	0	$3,000,000	$0
Severe Summer Weather	Thunderstorm Wind	8/4/2017	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/4/2017	50 MPH	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	6/18/2017	50 MPH	0	0	$35,000	$0
Severe Summer Weather	Thunderstorm Wind	6/18/2017	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	4/19/2017	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/22/2016	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/22/2016	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	6/16/2016	50 MPH	0	0	$12,000	$0
Severe Summer Weather	Thunderstorm Wind	6/5/2016	50 MPH	0	0	$8,000	$0
Severe Summer Weather	Thunderstorm Wind	7/14/2015	50 MPH	0	0	$10,000	$0
Severe Summer Weather	High Wind	11/24/2014	52 MPH	0	0	$200,000	$0
Severe Summer Weather	Thunderstorm Wind	8/12/2014	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/27/2014	52 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/27/2014	50 MPH	0	0	$2,000	$0

Source: John Ridinger

PORTAGE COUNTY HAZARD MITIGATION PLAN

February 2021

PREPARED BY:
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PREPARED FOR:
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Portage COUNTY

Appendices

Appendix A | Historical Hazard Events

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Drought & Extreme Heat	Drought	9/1/1999	N/A	0	0	$0	$4,000,000
Drought & Extreme Heat	Drought	8/1/1999	N/A	0	0	$0	$0
Drought & Extreme Heat	Drought	7/1/1999	N/A	0	0	$0	$0
Drought & Extreme Heat	Drought	6/1/1999	N/A	0	0	$0	$0
Drought & Extreme Heat	Drought	8/1/1996	N/A	0	0	$0	$0
Flash Flooding	Flash Flood	6/27/2019	N/A	0	0	$100,000	$0
Flash Flooding	Flash Flood	6/5/2019	N/A	0	0	$30,000	$0
Flash Flooding	Flash Flood	5/12/2014	N/A	0	0	$30,000	$0
Flash Flooding	Flash Flood	7/10/2013	N/A	0	0	$2,400,000	$0
Flash Flooding	Flash Flood	7/10/2013	N/A	0	0	$90,000	$0
Flash Flooding	Flash Flood	7/10/2013	N/A	0	0	$10,000	$0
Flash Flooding	Flash Flood	5/14/2011	N/A	0	0	$0	$0
Flash Flooding	Flash Flood	6/22/2006	N/A	0	0	$1,000,000	$0
Flash Flooding	Flash Flood	5/22/2004	N/A	0	0	$2,400,000	$0
Flash Flooding	Flash Flood	7/27/2003	N/A	0	0	$500,000	$0
Flash Flooding	Flash Flood	7/23/2003	N/A	0	0	$500,000	$0
Flash Flooding	Flash Flood	7/22/2003	N/A	0	0	$250,000	$0
Flash Flooding	Flash Flood	7/21/2003	N/A	0	0	$20,000,000	$0
Flash Flooding	Flash Flood	7/7/2003	N/A	0	0	$200,000	$0
Flash Flooding	Flash Flood	1/9/1998	N/A	0	0	$15,000	$0
Flash Flooding	Flash Flood	7/24/1997	N/A	0	0	$30,000	$0
Flash Flooding	Flash Flood	7/24/1997	N/A	0	0	$5,000	$0
Flash Flooding	Flash Flood	6/1/1997	N/A	0	0	$40,000	$20,000
Flash Flooding	Flash Flood	6/14/1996	N/A	0	0	$20,000	$0
Flash Flooding	Flash Flood	5/11/1996	N/A	0	0	$60,000	$0
Flash Flooding	Flash Flood	4/23/1996	N/A	0	0	$0	$0
Flooding	Flood	1/12/2017	N/A	0	0	$5,000	$0
Flooding	Flood	9/10/2011	N/A	0	0	$500	$0
Flooding	Flood	5/24/2011	N/A	0	0	$0	$0
Flooding	Flood	8/30/2005	N/A	0	0	$325,000	$0
Flooding	Flood	8/5/2005	N/A	0	0	$75,000	$0
Flooding	Flood	1/1/2005	N/A	0	0	$400,000	$0
Flooding	Flood	8/27/2003	N/A	0	0	$75,000	$0
Severe Summer Weather	Thunderstorm Wind	4/7/2020	50 MPH	0	0	$0	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	High Wind	1/12/2020	50 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	12/30/2019	52 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/18/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/18/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/18/2019	52 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	8/17/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/17/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/6/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/6/2019	52 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	56 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	60 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/28/2019	52 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	6/5/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/28/2019	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	4/14/2019	52 MPH	0	0	$2,000	$0
Severe Summer Weather	High Wind	2/24/2019	50 MPH	0	0	$60,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$1,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2018	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	5/22/2018	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/4/2018	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/4/2018	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/4/2018	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	4/27/2018	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	11/5/2017	91 MPH	0	0	$3,000,000	$0
Severe Summer Weather	Thunderstorm Wind	8/4/2017	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/4/2017	50 MPH	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	6/18/2017	50 MPH	0	0	$35,000	$0
Severe Summer Weather	Thunderstorm Wind	6/18/2017	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	4/19/2017	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/22/2016	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/22/2016	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	6/16/2016	50 MPH	0	0	$12,000	$0
Severe Summer Weather	Thunderstorm Wind	6/5/2016	50 MPH	0	0	$8,000	$0
Severe Summer Weather	Thunderstorm Wind	7/14/2015	50 MPH	0	0	$10,000	$0
Severe Summer Weather	High Wind	11/24/2014	52 MPH	0	0	$200,000	$0
Severe Summer Weather	Thunderstorm Wind	8/12/2014	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/27/2014	52 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/27/2014	50 MPH	0	0	$2,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	11/17/2013	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/10/2013	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/10/2013	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	6/13/2013	53 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	4/10/2013	56 MPH	0	0	$150,000	$0
Severe Summer Weather	High Wind	10/29/2012	50 MPH	0	0	$250,000	$0
Severe Summer Weather	Thunderstorm Wind	9/7/2012	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/26/2012	50 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	7/7/2012	50 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/5/2012	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/3/2012	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/3/2012	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	5/29/2012	50 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	2/24/2012	50 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	11/14/2011	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	8/25/2011	50 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	8/9/2011	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/22/2011	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/18/2011	63 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/11/2011	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	6/7/2011	50 MPH	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	5/25/2011	50 MPH	0	0	$7,000	$0
Severe Summer Weather	Thunderstorm Wind	5/23/2011	50 MPH	0	0	$50,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	High Wind	4/28/2011	50 MPH	0	0	$100,000	$0
Severe Summer Weather	Thunderstorm Wind	9/16/2010	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	9/16/2010	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	9/7/2010	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/28/2010	56 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/24/2010	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/24/2010	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/24/2010	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	7/24/2010	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/24/2010	50 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	6/23/2010	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	5/31/2010	50 MPH	0	0	$0	$0
Severe Summer Weather	Strong Wind	5/8/2010	40 MPH	0	0	$15,000	$0
Severe Summer Weather	High Wind	12/9/2009	52 MPH	0	0	$250,000	$0
Severe Summer Weather	Thunderstorm Wind	8/10/2009	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	5/29/2009	50 MPH	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	5/29/2009	50 MPH	0	0	$1,000	$0
Severe Summer Weather	High Wind	2/12/2009	52 MPH	0	0	$500,000	$0
Severe Summer Weather	Thunderstorm Wind	2/11/2009	54 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	9/14/2008	52 MPH	0	2	$5,000,000	$0
Severe Summer Weather	Thunderstorm Wind	7/22/2008	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	7/8/2008	50 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	7/8/2008	50 MPH	0	0	$50,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	7/8/2008	50 MPH	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	6/21/2008	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	6/13/2008	50 MPH	0	0	$7,000	$0
Severe Summer Weather	High Wind	1/30/2008	55 MPH	0	0	$20,000	$0
Severe Summer Weather	High Wind	1/9/2008	50 MPH	0	0	$25,000	$0
Severe Summer Weather	High Wind	12/23/2007	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	8/9/2007	50 MPH	0	0	$6,000	$0
Severe Summer Weather	Thunderstorm Wind	8/7/2007	50 MPH	0	0	$6,000	$0
Severe Summer Weather	Thunderstorm Wind	7/27/2007	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/19/2007	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	6/21/2007	50 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	6/19/2007	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	6/8/2007	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/25/2007	50 MPH	0	0	$1,000	$0
Severe Summer Weather	High Wind	12/1/2006	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	10/28/2006	50 MPH	0	0	$6,000	$0
Severe Summer Weather	Thunderstorm Wind	7/30/2006	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	7/10/2006	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/2/2006	50 MPH	0	0	$4,000	$0
Severe Summer Weather	Thunderstorm Wind	6/22/2006	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	6/22/2006	50 MPH	0	0	$6,000	$0
Severe Summer Weather	Thunderstorm Wind	6/22/2006	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Strong Wind	3/10/2006	40 MPH	0	0	$10,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	High Wind	2/17/2006	50 MPH	0	0	$40,000	$0
Severe Summer Weather	High Wind	11/6/2005	50 MPH	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	7/26/2005	50 MPH	0	0	$6,000	$0
Severe Summer Weather	Thunderstorm Wind	6/30/2005	50 MPH	0	0	$4,000	$0
Severe Summer Weather	Thunderstorm Wind	6/14/2005	52 MPH	0	0	$4,000	$0
Severe Summer Weather	Thunderstorm Wind	4/20/2005	50 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	12/7/2004	50 MPH	0	0	$15,000	$0
Severe Summer Weather	Strong Wind	9/9/2004	35 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	6/14/2004	50 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	5/25/2004	50 MPH	0	0	$37,000	$0
Severe Summer Weather	Thunderstorm Wind	5/22/2004	50 MPH	0	0	$4,000	$0
Severe Summer Weather	Thunderstorm Wind	5/21/2004	55 MPH	0	0	$750,000	$0
Severe Summer Weather	Thunderstorm Wind	5/18/2004	50 MPH	0	0	$4,000	$0
Severe Summer Weather	High Wind	3/5/2004	50 MPH	0	0	$50,000	$0
Severe Summer Weather	High Wind	11/12/2003	50 MPH	0	0	$75,000	$0
Severe Summer Weather	Thunderstorm Wind	11/12/2003	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	9/27/2003	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	9/26/2003	50 MPH	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	8/27/2003	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/27/2003	50 MPH	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	8/27/2003	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/26/2003	50 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/27/2003	50 MPH	0	0	$100,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	7/21/2003	54 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/21/2003	50 MPH	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/8/2003	50 MPH	0	0	$75,000	$0
Severe Summer Weather	Thunderstorm Wind	7/7/2003	50 MPH	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	7/7/2003	50 MPH	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	7/6/2003	50 MPH	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/4/2003	50 MPH	0	0	$100,000	$0
Severe Summer Weather	Strong Wind	5/11/2003	35 MPH	0	0	$35,000	$0
Severe Summer Weather	Thunderstorm Wind	11/10/2002	Unknown	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	11/10/2002	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/22/2002	Unknown	0	0	$250,000	$0
Severe Summer Weather	Thunderstorm Wind	8/16/2002	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	8/14/2002	Unknown	0	0	$500,000	$0
Severe Summer Weather	Thunderstorm Wind	7/29/2002	Unknown	0	0	$75,000	$0
Severe Summer Weather	Thunderstorm Wind	7/29/2002	Unknown	0	0	$35,000	$0
Severe Summer Weather	Thunderstorm Wind	7/28/2002	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	6/14/2002	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	5/31/2002	Unknown	0	0	$8,000	$0
Severe Summer Weather	Thunderstorm Wind	5/14/2002	Unknown	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	4/28/2002	Unknown	0	0	$15,000	$0
Severe Summer Weather	High Wind	3/9/2002	Unknown	0	2	$125,000	$0
Severe Summer Weather	High Wind	2/1/2002	Unknown	0	0	$60,000	$0
Severe Summer Weather	High Wind	12/14/2001	Unknown	0	0	$15,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	High Wind	10/25/2001	Unknown	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	10/24/2001	52 MPH	0	0	$5,000	$0
Severe Summer Weather	High Wind	10/16/2001	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	8/9/2001	Unknown	0	0	$100,000	$0
Severe Summer Weather	Thunderstorm Wind	8/9/2001	Unknown	0	0	$10,000	$0
Severe Summer Weather	High Wind	4/12/2001	Unknown	0	0	$15,000	$0
Severe Summer Weather	High Wind	2/9/2001	Unknown	0	0	$5,000	$0
Severe Summer Weather	High Wind	12/11/2000	Unknown	0	0	$150,000	$0
Severe Summer Weather	Thunderstorm Wind	9/20/2000	Unknown	0	0	$25,000	$0
Severe Summer Weather	Thunderstorm Wind	7/28/2000	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/14/2000	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	6/16/2000	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	6/14/2000	Unknown	0	0	$1,500,000	$0
Severe Summer Weather	Thunderstorm Wind	6/14/2000	Unknown	0	0	$30,000	$0
Severe Summer Weather	Thunderstorm Wind	6/2/2000	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	5/18/2000	Unknown	0	0	$60,000	$0
Severe Summer Weather	Lightning	4/16/2000	N/A	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	3/9/2000	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	1/10/2000	Unknown	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	10/13/1999	Unknown	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	9/29/1999	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/31/1999	Unknown	0	0	$75,000	$0
Severe Summer Weather	Thunderstorm Wind	7/28/1999	Unknown	0	0	$30,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	7/9/1999	58 MPH	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	7/6/1999	Unknown	0	0	$20,000	$0
Severe Summer Weather	High Wind	11/11/1998	53 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	11/10/1998	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	9/7/1998	Unknown	0	0	$30,000	$0
Severe Summer Weather	Thunderstorm Wind	7/21/1998	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	7/21/1998	Unknown	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	6/13/1998	Unknown	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	6/12/1998	Unknown	0	0	$1,000	$0
Severe Summer Weather	Thunderstorm Wind	5/31/1998	Unknown	0	0	$2,000	$0
Severe Summer Weather	High Wind	3/28/1998	Unknown	0	0	$10,000	$0
Severe Summer Weather	Lightning	8/16/1997	N/A	0	0	$95,000	$0
Severe Summer Weather	Thunderstorm Wind	8/16/1997	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	8/16/1997	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	6/25/1997	Unknown	0	0	$30,000	$0
Severe Summer Weather	Thunderstorm Wind	5/3/1997	Unknown	0	0	$20,000	$0
Severe Summer Weather	Thunderstorm Wind	5/3/1997	Unknown	0	0	$50,000	$0
Severe Summer Weather	Heavy Rain	5/1/1997	N/A	0	0	$0	$34,480
Severe Summer Weather	High Wind	2/27/1997	57 MPH	0	0	$5,000	$0
Severe Summer Weather	High Wind	2/22/1997	50 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	2/21/1997	50 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	10/30/1996	58 MPH	0	0	$200,000	$100,000
Severe Summer Weather	Thunderstorm Wind	9/12/1996	Unknown	0	0	$5,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Heavy Rain	9/7/1996	N/A	0	0	$0	$0
Severe Summer Weather	High Wind	9/7/1996	50 MPH	0	0	$5,000	$5,000
Severe Summer Weather	Lightning	8/23/1996	N/A	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/15/1996	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	8/15/1996	Unknown	0	0	$2,000	$0
Severe Summer Weather	Lightning	8/8/1996	N/A	0	0	$25,000	$0
Severe Summer Weather	Lightning	7/13/1996	N/A	0	2	$0	$0
Severe Summer Weather	Lightning	6/24/1996	N/A	0	0	$10,000	$0
Severe Summer Weather	Thunderstorm Wind	6/24/1996	80 MPH	0	0	$75,000	$0
Severe Summer Weather	Lightning	6/14/1996	N/A	0	0	$30,000	$0
Severe Summer Weather	High Wind	4/25/1996	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	4/12/1996	54 MPH	0	0	$0	$0
Severe Summer Weather	High Wind	3/25/1996	50 MPH	0	0	$10,000	$0
Severe Summer Weather	High Wind	2/10/1996	50 MPH	0	0	$2,000	$0
Severe Summer Weather	High Wind	1/27/1996	50 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/13/1995	Unknown	0	0	$2,000	$0
Severe Summer Weather	Thunderstorm Wind	7/25/1995	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/16/1995	Unknown	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	7/15/1995	Unknown	0	0	$2,000	$10,000
Severe Summer Weather	Thunderstorm Wind	7/15/1995	Unknown	0	0	$3,000	$0
Severe Summer Weather	Thunderstorm Wind	7/13/1995	Unknown	0	0	$80,000	$0
Severe Summer Weather	Thunderstorm Wind	6/27/1995	Unknown	0	0	$15,000	$0
Severe Summer Weather	Thunderstorm Wind	5/29/1995	Unknown	0	0	$40,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	5/29/1995	Unknown	0	0	$40,000	$0
Severe Summer Weather	Thunderstorm Wind	5/24/1995	Unknown	0	0	$150,000	$0
Severe Summer Weather	Thunderstorm Wind	4/18/1995	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/13/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	8/4/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/7/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/7/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/6/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	7/2/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	6/20/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	4/27/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	4/27/1994	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	4/13/1994	Unknown	0	0	$50,000	$0
Severe Summer Weather	Thunderstorm Wind	9/2/1993	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	8/31/1993	Unknown	0	0	$5,000	$0
Severe Summer Weather	Thunderstorm Wind	8/10/1992	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/24/1992	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/12/1992	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/10/1992	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/17/1991	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/23/1991	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/7/1991	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/30/1991	Unknown	0	0	$0	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	9/6/1990	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/22/1990	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	11/15/1989	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/4/1989	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/27/1989	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/3/1989	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/25/1989	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/2/1987	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/2/1987	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/29/1987	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/8/1987	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	9/30/1986	61 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	3/10/1986	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/10/1984	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/21/1983	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/21/1983	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/21/1983	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/4/1983	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/2/1983	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/15/1982	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/22/1982	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/22/1981	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/16/1981	Unknown	0	0	$0	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Summer Weather	Thunderstorm Wind	4/28/1981	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/11/1980	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/21/1980	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	4/8/1980	52 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/27/1978	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/5/1977	56 MPH	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/7/1977	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	8/13/1975	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	4/14/1974	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/21/1967	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	7/28/1963	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	6/10/1963	Unknown	0	0	$0	$0
Severe Summer Weather	Thunderstorm Wind	5/12/1956	61 MPH	0	0	$0	$0
Severe Winter Weather	Extreme Cold/Wind Chill	1/30/2019	N/A	0	0	$0	$0
Severe Winter Weather	Winter Storm	1/19/2019	N/A	0	0	$150,000	$0
Severe Winter Weather	Winter Storm	1/12/2018	N/A	0	0	$150,000	$0
Severe Winter Weather	Winter Storm	3/13/2017	N/A	0	0	$150,000	$0
Severe Winter Weather	Heavy Snow	2/15/2016	N/A	0	0	$200,000	$0
Severe Winter Weather	Extreme Cold/Wind Chill	2/20/2015	N/A	0	0	$0	$0
Severe Winter Weather	Extreme Cold/Wind Chill	2/15/2015	N/A	0	0	$0	$0
Severe Winter Weather	Winter Storm	2/1/2015	N/A	0	0	$250,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Winter Weather	Winter Storm	2/17/2014	N/A	0	0	$150,000	$0
Severe Winter Weather	Winter Storm	2/4/2014	N/A	0	0	$100,000	$0
Severe Winter Weather	Extreme Cold/Wind Chill	1/28/2014	N/A	0	0	$0	$0
Severe Winter Weather	Extreme Cold/Wind Chill	1/6/2014	N/A	0	0	$0	$0
Severe Winter Weather	Ice Storm	3/18/2013	N/A	0	0	$50,000	$0
Severe Winter Weather	Winter Storm	12/26/2012	N/A	0	0	$75,000	$0
Severe Winter Weather	Extreme Cold/Wind Chill	4/29/2012	N/A	0	0	$150,000	$0
Severe Winter Weather	Extreme Cold/Wind Chill	3/27/2012	N/A	0	0	$0	$0
Severe Winter Weather	Winter Storm	2/21/2011	N/A	0	0	$200,000	$0
Severe Winter Weather	Winter Storm	2/1/2011	N/A	0	0	$300,000	$0
Severe Winter Weather	Winter Storm	2/5/2010	N/A	0	0	$350,000	$0
Severe Winter Weather	Winter Storm	1/27/2009	N/A	0	0	$250,000	$0
Severe Winter Weather	Extreme Cold/Wind Chill	1/15/2009	N/A	0	0	$0	$0
Severe Winter Weather	Winter Storm	1/9/2009	N/A	0	0	$80,000	$0
Severe Winter Weather	Winter Storm	12/19/2008	N/A	0	0	$30,000	$0
Severe Winter Weather	Winter Storm	3/7/2008	N/A	0	0	$600,000	$0
Severe Winter Weather	Winter Storm	3/4/2008	N/A	0	0	$750,000	$0
Severe Winter Weather	Winter Storm	2/25/2008	N/A	0	0	$75,000	$0
Severe Winter Weather	Winter Storm	2/12/2008	N/A	0	0	$75,000	$0
Severe Winter Weather	Winter Storm	1/1/2008	N/A	0	0	$75,000	$0
Severe Winter Weather	Winter Weather	12/15/2007	N/A	0	0	$300,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Winter Weather	Ice Storm	3/15/2007	N/A	0	0	$50,000	$0
Severe Winter Weather	Winter Storm	2/13/2007	N/A	0	0	$40,000	$0
Severe Winter Weather	Winter Storm	4/2/2005	N/A	0	0	$300,000	$0
Severe Winter Weather	Winter Storm	3/1/2005	N/A	0	0	$75,000	$0
Severe Winter Weather	Winter Storm	1/22/2005	N/A	0	0	$150,000	$0
Severe Winter Weather	Ice Storm	1/5/2005	N/A	0	0	$500,000	$0
Severe Winter Weather	Winter Storm	12/22/2004	N/A	0	0	$1,200,000	$0
Severe Winter Weather	Winter Storm	12/19/2004	N/A	0	0	$125,000	$0
Severe Winter Weather	Winter Storm	12/13/2004	N/A	0	0	$125,000	$0
Severe Winter Weather	Heavy Snow	3/16/2004	N/A	0	0	$150,000	$0
Severe Winter Weather	Winter Storm	12/5/2003	N/A	0	0	$200,000	$0
Severe Winter Weather	Heavy Snow	12/24/2002	N/A	0	0	$100,000	$0
Severe Winter Weather	Winter Storm	3/26/2002	N/A	0	0	$100,000	$0
Severe Winter Weather	Winter Storm	3/24/2002	N/A	0	0	$50,000	$0
Severe Winter Weather	Heavy Snow	2/27/2002	N/A	0	0	$30,000	$0
Severe Winter Weather	Heavy Snow	2/4/2002	N/A	0	0	$30,000	$0
Severe Winter Weather	Heavy Snow	3/5/2001	N/A	0	0	$0	$0
Severe Winter Weather	Winter Storm	12/13/2000	N/A	0	0	$75,000	$0
Severe Winter Weather	Heavy Snow	1/19/2000	N/A	0	0	$25,000	$0
Severe Winter Weather	Heavy Snow	3/5/1999	N/A	0	0	$10,000	$0
Severe Winter Weather	Heavy Snow	1/14/1999	N/A	0	0	$25,000	$0
Severe Winter Weather	Winter Storm	1/13/1999	N/A	0	0	$2,000	$0
Severe Winter Weather	Winter Storm	1/8/1999	N/A	0	0	$2,000	$0

Hazard	Event Type	Date	Magnitude (Hail Size, Wind Speed, EF-Scale)	Deaths	Injuries	Property Damage	Crop Damage
Severe Winter Weather	Winter Storm	1/2/1999	N/A	0	2	$15,000	$0
Severe Winter Weather	Heavy Snow	12/30/1997	N/A	0	0	$0	$0
Severe Winter Weather	Heavy Snow	12/6/1997	N/A	0	0	$0	$0
Severe Winter Weather	Winter Weather	1/16/1997	N/A	0	0	$0	$0
Severe Winter Weather	Heavy Snow	11/9/1996	N/A	0	0	$1,000,000	$0
Severe Winter Weather	Heavy Snow	1/2/1996	N/A	0	0	$100,000	$0
Tornadoes	Tornado	6/16/2019	EF1	0	0	$25,000	$0
Tornadoes	Tornado	9/10/2014	EF0	0	0	$40,000	$0
Tornadoes	Tornado	9/10/2014	EF0	0	0	$5,000	$0
Tornadoes	Tornado	9/10/2014	EF0	0	0	$15,000	$0
Tornadoes	Tornado	7/4/2006	F0	0	0	$25,000	$0
Tornadoes	Tornado	7/4/2006	F0	0	0	$0	$0
Tornadoes	Tornado	7/7/2003	F0	0	0	$0	$0
Tornadoes	Tornado	4/9/1998	F0	0	0	$0	$0
Tornadoes	Tornado	7/12/1992	F2	0	0	$250,000	$0
Tornadoes	Tornado	7/12/1992	F1	0	0	$25,000	$0
Tornadoes	Tornado	5/31/1985	F5	0	0	$250,000,000	$0
Tornadoes	Tornado	6/16/1981	F1	0	0	$250,000	$0
Tornadoes	Tornado	6/3/1973	F3	0	1	$25,000	$0
Tornadoes	Tornado	6/25/1968	F1	0	1	$25,000	$0
Tornadoes	Tornado	5/23/1962	F1	0	0	$250,000	$0

Appendix B | Previous Mitigation Actions Status

APPENDIX B: PREVIOUS MITIGATION ACTIONS STATUS

Previous Mitigation Actions Status

#	Community	Action	Date Range	Status	Associated Action in Update (Appendix C)
Portage County					
1	Portage County	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	Ongoing; 30%	2
2	Portage County	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	Completed	N/A
3	Portage County	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	Ongoing; 5%	7
4	Portage County	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	Ongoing	3
5	Portage County	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	Ongoing; 80%	4
6	Portage County	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	Completed; 2017	N/A
7	Portage County	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	Completed	N/A
8	Portage County	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	Completed	N/A
9	Portage County	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	Completed	N/A
10	Portage County	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	Ongoing	9
11	Portage County	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	Unchanged	11
12	Portage County	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	Ongoing	17
13	Portage County	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	Completed	N/A

APPENDIX B: PREVIOUS MITIGATION ACTIONS STATUS

#	Community	Action	Date Range	Status	Associated Action in Update (Appendix C)
14	Portage County	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	Deleted	N/A
15	Portage County	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	Completed	N/A
16	Portage County	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	Completed	N/A
17	Portage County	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	Ongoing	13
18	Portage County	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	Deleted	N/A
19	Portage County	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	Completed	N/A
20	Portage County	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	Completed	N/A
21	Portage County	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2016	Completed	N/A
22	Portage County	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	Completed	N/A
23	Portage County	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	Completed	N/A
24	Portage County	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	Completed	N/A
25	Portage County	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	Ongoing	19

#	Community	Action	Date Range	Status	Associated Action in Update (Appendix C)
26	Portage County	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	Ongoing	14
27	Portage County	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	Deleted	N/A
28	Portage County	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	Deleted	N/A
29	Portage County	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	Unchanged	97
30	Portage County	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	Completed	N/A
31	Portage County	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	Ongoing; as necessary.	49
32	Portage County	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	6/1/2020	Ongoing; as incidents occur	52
33	Portage County	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	Ongoing	53
34	Portage County	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	Ongoing	60
35	Portage County	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	Deleted; included in previous action.	N/A
36	Portage County	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	Ongoing	57
37	Portage County	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	Completed	N/A
38	Portage County	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	Ongoing	58

#	Community	Action	Date Range	Status	Associated Action in Update (Appendix C)
39	Portage County	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	Ongoing	50
40	Portage County	Clean and maintain ditches according to the determined cause.	7/1/2015 – 6/1/2020	Ongoing	55
41	Portage County	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	Ongoing	93
42	Portage County	Review current tree management practices.	7/1/2015 – 6/1/2020	Ongoing/ Updated language	66
43	Portage County	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	Ongoing/ Updated language	66
44	Portage County	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	Deleted	N/A
45	Portage County	Compile relevant information on “preparedness tips” for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	Deleted	N/A
46	Portage County	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	Ongoing	15
47	Portage County	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	Ongoing	80
48	Portage County	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	Ongoing	81
49	Portage County	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	Completed	N/A
		Cities & Villages			
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 – 6/1/2020	Ongoing	36

APPENDIX B: PREVIOUS MITIGATION ACTIONS STATUS

#	Community	Action	Date Range	Status	Associated Action in Update (Appendix C)
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 – 6/1/2020	Deleted; Village dissolved in 2017	N/A
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 - 6/1/2020	Ongoing	41
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14 - 12/31/19	Ongoing	5
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14- 12/31/19	Ongoing	8
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 - 6/1/2020	Ongoing	43
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 - 6/1/2020	Ongoing	44
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 - 6/1/2020	Completed with modifications in late 2018	N/A
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 - 6/1/2020	Ongoing	10
10	Village of Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 - 6/1/2020	Ongoing	40

Appendix C | Matrix Scoring Spreadsheet

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
1	Multiple Hazards	Continue to maintain and enhance outdoor warning capabilities for tornados and severe weather events.	Hiram	5.00	5.00	5.00	3.00	5.00	23.00	1823.00	1
2	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Portage County, Kent	4.75	4.75	4.25	4.50	4.25	22.50	1822.50	1
3	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	Portage County, Kent	4.50	4.75	4.25	4.00	3.75	21.25	1821.25	1
4	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	Portage County, Kent	4.50	4.50	4.25	4.25	3.75	21.25	1821.25	1
5	Multiple Hazards	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	Hiram	5.00	5.00	3.00	3.00	5.00	21.00	1821.00	1
6	Multiple Hazards	Work with the Portage County OHS/EM to enact the damage assessment software solution and disaster recovery education to ensure effective transition from response and recovery and maximize local, state and federal programs for residents of the village.	Sugar Bush Knolls	5.00	5.00	3.00	4.00	4.00	21.00	1821.00	1

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
7	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Portage County, Kent	4.50	4.50	4.25	3.75	3.75	20.75	1820.75	1
8	Multiple Hazards	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Portage County, Kent	3.67	4.67	4.67	3.33	4.00	20.33	1820.33	1
9	Multiple Hazards	Revisit emergency support functions update needs list and provide documentation.	Portage County, Kent	4.00	4.50	4.00	3.75	4.00	20.25	1820.25	1
10	Multiple Hazards	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	Sugar Bush Knolls	5.00	4.00	3.00	4.00	4.00	20.00	1820.00	1
11	Multiple Hazards	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Portage County, Kent	4.00	4.50	4.00	3.50	3.75	19.75	1819.75	1
12	Multiple Hazards	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	Portage County, Kent	3.33	4.67	4.67	3.33	3.33	19.33	1819.33	1

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
13	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Portage County, Kent	4.00	4.00	3.50	3.75	4.00	19.25	1819.25	1
14	Multiple Hazards	Continue to push information on new emergency communications onto social media.	Portage County, Kent	4.25	4.75	3.75	3.25	3.25	19.25	1819.25	1
15	Multiple Hazards	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Portage County, Kent	3.50	4.25	3.50	3.50	4.25	19.00	1819.00	1
16	Multiple Hazards	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.	Portage County, Kent	4.00	4.67	4.00	3.00	3.00	18.67	1818.67	1
17	Multiple Hazards	Continue damage assessment training throughout the County and provide documentation.	Portage County, Kent	3.75	4.00	4.00	3.25	3.50	18.50	1818.50	1
18	Multiple Hazards	Adopt the International Building Code and International Residential Code.	Portage County, Kent	4.00	4.00	3.33	3.33	3.67	18.33	1818.33	1
19	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Portage County, Kent	3.50	4.00	3.25	3.50	4.00	18.25	1818.25	1

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
20	Multiple Hazards	Increase road weight capacity to withstand first response vehicles and increase dry well capacities for first responders responding to the Village.	Sugar Bush Knolls	3.00	3.00	3.00	4.00	5.00	18.00	1818.00	1
21	Multiple Hazards	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	Portage County, Kent	3.50	4.50	3.75	2.75	2.50	17.00	1817.00	1
22	Multiple Hazards	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	Portage County, Kent	2.33	4.33	3.67	2.67	2.67	15.67	1815.67	1
23	Multiple Hazards	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	Portage County, Kent	2.67	4.33	3.67	2.00	2.33	15.00	1815.00	1
24	Multiple Hazards	Perform a countywide sustainability study to draft long-term goals and document strategies related to combating climate change in the County to reduce greenhouse gas (GHG) emissions.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1805.00	1

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
25	Multiple Hazards	Engage necessary stakeholders to review Portage County's overall mission to limit greenhouse gas emissions through current standards, renovations and new construction or other green initiatives.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1805.00	1
26	Multiple Hazards	Consider including green design standards in building codes.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1805.00	1
27	Multiple Hazards	Identify areas in permitting processes that can be sped up for projects that meet certain environmental standards (green tape).	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1805.00	1
28	Multiple Hazards	Perform a countywide food system security study and draft a plan to improve local food access during hazard events.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1805.00	1
29	Multiple Hazards	Work with the Ohio EPA and to identify GHG emissions at the County level.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1805.00	1
30	Flooding	Continue to evaluate Engineering and other flood control options for tinkers creek and flooding on SR 303.	Streetsboro	5.00	5.00	5.00	4.00	5.00	24.00	1724.00	2
31	Flooding	Purchase remaining homes in Geauga Lake's 100 year floodplain.	Aurora	3.00	5.00	5.00	4.00	5.00	22.00	1722.00	2

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
32	Flooding	Encourage/assist the Village of Windham to join the NFIP.	Portage County	5.00	5.00	5.00	3.00	3.00	21.00	1721.00	2
33	Flooding	Review engineering studies and stormwater capacities to develop plans to address flooding concerns on Hinsdale street.	Hiram	3.00	4.00	5.00	4.00	5.00	21.00	1721.00	2
34	Flooding	Review the potential of flood retrofitting and/or acquisition and demolition of the current Fire Station within a FEMA Floodplain of Eagle Creek due to repetitive flooding of the station and impacts to first response apparatus.	Garrettsville	3.00	4.00	4.00	5.00	5.00	21.00	1721.00	2
35	Flooding	Review the potential and enact flood retrofitting and/or acquisition and demolition of businesses/ property within a FEMA Floodplain along the Cuyahoga River subject to repetitive flooding.	Mantua	4.00	3.00	5.00	4.00	5.00	21.00	1721.00	2
36	Flooding	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	Aurora	3.00	4.00	5.00	4.00	5.00	21.00	1721.00	2
37	Flooding	Install stormwater BMPs to assist with stormwater management in Geauga Lake low lying area	Aurora	4.00	5.00	5.00	3.00	4.00	21.00	1721.00	2

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
38	Flooding	Resilient infrastructure wastewater/stormwater retention basin project design.	Ravenna	3.00	4.00	5.00	4.00	5.00	21.00	1721.00	2
39	Flooding	Enhance wetland buffer requirements to help protect water quality.	Portage County, Kent	3.67	4.33	4.33	4.00	3.67	20.00	1720.00	2
40	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Windham	4.00	5.00	5.00	2.00	4.00	20.00	1720.00	2
41	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Garrettsville	4.00	5.00	5.00	2.00	4.00	20.00	1720.00	2
42	Flooding	Evaluate engineering options and/or the removal of a dam to limit flooding along Eagle Creek in the Village.	Garrettsville	3.00	3.00	4.00	5.00	5.00	20.00	1720.00	2
43	Flooding	Enhance wetland buffer requirements in order to help protect water quality.	Mantua	5.00	5.00	5.00	2.00	3.00	20.00	1720.00	2

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
44	Flooding	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	Ravenna	3.00	4.00	5.00	3.00	5.00	20.00	1720.00	2
45	Flooding	Purchase and install four generators and the critical lift stations.	Ravenna	3.00	5.00	3.00	4.00	5.00	20.00	1720.00	2
46	Flooding	Purchase a mid-sized track excavator to maintain the ditches and streams within city limits and replace undersized storm pipe.	Ravenna	3.00	3.00	5.00	4.00	5.00	20.00	1720.00	2
47	Flooding	Fix storm pipes to improve stormwater management.	Portage County, Kent	3.75	3.75	4.25	3.75	4.00	19.50	1719.50	2
48	Flooding	Hire an engineering firm to study a nearly 300-acre drainage course to determine how best to drain area through a swampy wet area with a pond in the middle.	Ravenna	3.00	4.00	5.00	3.00	4.00	19.00	1719.00	2
49	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Portage County, Kent	4.00	5.00	4.00	2.67	3.00	18.67	1718.67	2
50	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	Portage County, Kent	3.67	3.67	3.67	3.67	3.67	18.33	1718.33	2
51	Flooding	Complete a stormwater drainage study for known problem areas.	Portage County, Kent	3.50	4.50	4.25	3.00	2.75	18.00	1718.00	2

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
52	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Portage County, Kent	3.33	4.33	3.67	3.00	3.00	17.33	1717.33	2
53	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Portage County, Kent	3.67	3.67	3.67	3.00	3.00	17.00	1717.00	2
54	Flooding	Require that floodplains be kept as open space.	Portage County, Kent	3.75	3.50	4.00	2.75	2.75	16.75	1716.75	2
55	Flooding	Clean and maintain ditches according to the determined cause.	Portage County, Kent	3.33	3.33	3.33	3.33	3.33	16.67	1716.67	2
56	Flooding	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	Portage County, Kent	3.25	4.00	3.50	2.50	3.00	16.25	1716.25	2
57	Flooding	Implement corrective measures identified in the above actions.	Portage County, Kent	3.33	3.67	3.33	2.67	3.00	16.00	1716.00	2
58	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	Portage County, Kent	3.50	3.25	3.25	3.00	2.75	15.75	1715.75	2

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
59	Flooding	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Portage County, Kent	3.33	4.33	3.00	2.33	2.67	15.67	1715.67	2
60	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	Portage County, Kent	2.67	3.67	3.33	2.67	3.00	15.33	1715.33	2
61	Flooding	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	Portage County, Kent	3.33	3.33	3.33	2.33	2.67	15.00	1715.00	2
62	Flooding	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Portage County, Kent	3.00	3.67	2.33	3.00	2.33	14.33	1714.33	2
63	Flooding	Raise roadway profiles above flood elevation.	Portage County, Kent	2.50	3.75	2.25	2.25	2.75	13.50	1713.50	2

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
64	Flooding	Retrofit properties that suffer from frequent flash flooding utilizing available stormwater management techniques.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1705.00	2
65	Flooding	Identify ditches that can be dredged or treated with netting and other filtration systems to limit dirt flow, debris blockage and flooding.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1705.00	2
66	Infrastructure & Utility Failure	Work to enact a tree management program and/or contractor to limit utility disruptions and impacts to people and property during high wind events.	Hiram, Sugar Bush Knolls	4.00	4.00	5.00	4.00	4.50	21.50	1621.50	3
67	Infrastructure & Utility Failure	Insure BDAs are installed in larger buildings to increase radio signal for first responders (repeaters).	Kent	3.00	4.00	4.00	3.00	4.00	18.00	1618.00	3
68	Infrastructure & Utility Failure	Purchase and install backup generators for public buildings and critical facilities.	Portage County, Kent	3.33	4.67	2.67	3.33	3.00	17.00	1617.00	3
69	Tornadoes	Install residential & community safe rooms.	Portage County	3.00	5.00	5.00	4.00	4.00	21.00	1521.00	4
70	Tornadoes	Collaborate with local, county and state partners for the feasibility and construction of a community tornado safe shelter for Windham Village.	Windham	3.00	3.00	5.00	4.00	5.00	20.00	1520.00	4

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
71	Tornadoes	Require construction of safe rooms in new schools, daycares, and nursing homes.	Portage County	4.00	4.67	3.33	3.33	4.00	19.33	1519.33	4
72	Tornadoes	Conduct tornado drills in public buildings.	Portage County, Kent	4.00	4.00	2.67	2.00	2.33	15.00	1515.00	4
73	Tornadoes	Distribute tornado shelter location information.	Portage County, Kent	2.67	4.33	2.67	2.33	2.33	14.33	1514.33	4
74	Tornadoes	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	Portage County, Kent	2.33	3.00	1.67	1.67	2.00	10.67	1510.67	4
75	Severe Summer Weather	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	Portage County, Kent	4.50	4.50	4.50	4.50	4.50	22.50	1422.50	5
76	Severe Summer Weather	Install and maintain surge protection on critical electronic equipment.	Portage County, Kent	4.67	4.67	3.33	4.67	4.67	22.00	1422.00	5
77	Severe Summer Weather	Post warning signs at local parks, county fairs, and other outdoor areas.	Portage County, Kent	2.67	4.33	3.00	2.33	3.00	15.33	1415.33	5
78	Severe Summer Weather	Convert traffic lights to mast arms.	Portage County, Kent	2.00	4.67	3.00	2.33	2.67	14.67	1414.67	5

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
79	Severe Summer Weather	Provide informational packets (paper or digital) on micro and macro bursts to the public.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1405.00	5
80	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	Portage County, Kent	4.50	4.75	4.25	4.50	4.50	22.50	1322.50	6
81	Hazardous Materials	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Portage County, Kent	3.75	4.25	3.75	4.00	4.25	20.00	1320.00	6
82	Hazardous Materials	Review and update County Commodity Flow Study.	Portage County, Kent	3.00	3.67	3.00	3.33	3.00	16.00	1316.00	6
83	Hazardous Materials	Create a radiological emergency plan for areas within a 50-mile radius of a nuclear powerplant.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1305.00	6
84	Terrorism	Continue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the village and off-site community partners.	Streetsboro, Hiram, Windham	5.00	5.00	5.00	4.00	5.00	24.00	1224.00	7
85	Terrorism	Work with local and State law enforcement officials to identify risk areas in the County.	Portage County, Kent	3.00	4.00	3.00	3.50	3.25	16.75	1216.75	7

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
86	Terrorism	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	Portage County, Kent	3.25	3.75	3.00	3.00	3.00	16.00	1216.00	7
87	Terrorism	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	Portage County, Kent	3.67	3.67	2.67	3.00	3.00	16.00	1216.00	7
88	Terrorism	Cybersecurity: Install server redundancies for public IT infrastructure.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	1205.00	7
89	Severe Winter Weather	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	Portage County, Kent	3.67	4.67	3.33	3.67	4.00	19.33	1119.33	8
90	Severe Winter Weather	Plan for and maintain adequate road and debris clearing capabilities.	Portage County, Kent	3.67	4.67	3.00	3.33	3.67	18.33	1118.33	8
91	Severe Winter Weather	Ensure the development and enforcement of building codes for roof snow loads.	Portage County, Kent	3.67	4.33	3.00	3.33	3.67	18.00	1118.00	8
92	Severe Winter Weather	Use snow fences or “living snow fences” (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	Portage County, Kent	3.67	4.33	3.67	3.00	3.00	17.67	1117.67	8

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
93	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	Portage County, Kent	3.00	4.33	3.00	3.00	3.00	16.33	1116.33	8
94	Severe Winter Weather	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	Portage County, Kent	2.67	4.33	2.67	2.33	2.00	14.00	1114.00	8
95	Epidemic	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	Portage County, Kent	4.75	4.75	4.00	4.75	4.00	22.25	1022.25	9
96	Dam Failure	Obtain inundation mapping for high hazard potential dams.	Portage County	5.00	5.00	5.00	4.00	4.00	23.00	923.00	10
97	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Portage County, Kent	3.67	3.67	4.33	3.33	4.33	19.33	919.33	10
98	Dam Failure	Rehabilitate high hazard potential dams.	Portage County	1.00	1.00	5.00	3.00	5.00	15.00	915.00	10
99	Transportation	Complete a full transportation study to identify risk areas and transportation behaviors.	Portage County, Kent	2.33	4.00	3.00	2.67	3.00	15.00	815.00	11
100	Transportation	Improve public transportation and overall transportation access.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	805.00	11

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
101	Drought & Extreme Heat	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	Portage County, Kent	4.00	4.67	4.67	2.67	2.33	18.33	718.33	12
102	Drought & Extreme Heat	Encourage or mandate the use of local plants on public property (xeriscaping).	Portage County, Kent	3.33	4.67	3.67	3.00	3.00	17.67	717.67	12
103	Drought & Extreme Heat	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	Portage County, Kent	2.67	3.67	3.00	2.33	2.33	14.00	714.00	12
104	Drought & Extreme Heat	Develop of list of criteria that triggers drought-related activities when met.	Portage County, Kent	2.67	3.00	3.67	2.00	2.00	13.33	713.33	12
105	Invasive Species	Complete an ecological and economic impact study for local and nearby invasive species.	Portage County, Kent	2.33	4.00	3.00	2.33	2.33	14.00	614.00	13
106	Landslides, Erosion, and Mine Subsidence	Limit or prevent development in identified risk areas.	Portage County, Kent	3.67	4.00	4.00	3.67	4.00	19.33	519.33	14
107	Landslides, Erosion, and Mine Subsidence	Compile a complete list of any underground mines in the County.	Portage County, Kent	3.67	4.67	3.33	3.67	3.00	18.33	518.33	14
108	Landslides, Erosion, and Mine Subsidence	Use GIS to identify and map landslide risk areas.	Portage County, Kent	3.00	3.67	3.00	2.00	2.67	14.33	514.33	14

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
109	Landslides, Erosion, and Mine Subsidence	Acquire and demolish or relocate at-risk properties and infrastructure.	Portage County	2.00	5.00	2.50	2.00	2.00	13.50	513.50	14
110	Landslides, Erosion, and Mine Subsidence	Work with local representatives to map the locations of abandoned mines.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	505.00	14
111	Landslides, Erosion, and Mine Subsidence	Digitize old mine maps.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	505.00	14
112	Landslides, Erosion, and Mine Subsidence	Confirm the locations of mines from old mine maps.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	505.00	14
113	Landslides, Erosion, and Mine Subsidence	Consider buying out, demolishing, and relocating properties built on top of abandoned mines.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	505.00	14
114	Landslides, Erosion, and Mine Subsidence	Provide ODNR with updated abandoned mine locations.	Portage County	1.00	1.00	1.00	1.00	1.00	5.00	505.00	14
115	Earthquakes	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	Portage County, Kent	4.00	4.00	4.00	4.00	3.50	19.50	419.50	15
116	Wildfire	Routinely inspect the functionality of fire hydrants and provide documentation.	Portage County, Kent	4.00	5.00	4.00	3.33	3.33	19.67	319.67	16

	Hazard	Mitigation Action	Community	Cost Effective	Technically Feasible	Environ-mentally Sound	Immediate Need	Total Risk Reduction	Raw Score	Hazard Priority	Action Score
117	Wildfire	Ensure that buildings have fire extinguishers and fire detectors installed.	Portage County, Kent	4.00	4.75	3.50	3.25	3.75	19.25	319.25	16
118	Wildfire	Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.	Portage County	3.00	5.00	5.00	3.00	3.00	19.00	319.00	16
119	Wildfire	Develop a vegetation management plan to reduce wildfire risk.	Portage County	3.00	4.00	4.00	3.00	3.00	17.00	317.00	16

Appendix D | Critical Facilities List

Type	Number
State Property	1019
Municipality Property	900
Places of Worship	377
Hospitals, Nursing Homes	273
County Property	403
Board of Education Property	226
Federal Property	53
Township Property	191
Private Hospitals	17

Appendix E | Sources

APPENDIX E: SOURCES

Introduction
http://www.dot.state.oh.us/Divisions/Planning/TechServ/TIM/Documents/RI34A/RI-34A-POR.pdf
http://www.dot.state.oh.us/Divisions/Planning/TechServ/TIM/Documents/RI34B/RI-34B-POR.pdf
http://www.dot.state.oh.us/Divisions/Planning/TechServ/TIM/Documents/RI339/RI-339-POR.pdf
http://www.dot.state.oh.us/Divisions/Planning/TechServ/TIM/Documents/RI82B/RI82B_SR.pdf
https://naturepreserves.ohiodnr.gov/gollwoods
https://gis3.dot.state.oh.us/OhioRail/

History and Demographics
https://www.census.gov/quickfacts/

Dam Failure
https://www.fema.gov/dam-safety-concepts
http://codes.ohio.gov/oac/1501:21-13-01
https://gis2.ohiodnr.gov/MapViewer/?config=ohiodams

Drought
https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OH
https://www.weather.gov/cle/2012NotableEvents
https://www.nass.usda.gov/Publications/AgCensus/2012/Online_Resources/County_Profiles/Ohio/
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https://quickstats.nass.usda.gov/
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Earthquakes
https://www.ready.gov/about-us
https://www.ready.gov/earthquakes
http://www.geo.mtu.edu/UPSeis/hazards.html
http://geosurvey.ohiodnr.gov/live-helicorder-charts-pgs/bcoh-station-info

Epidemic/Pandemic
https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section11.html
https://www.wkyc.com/article/news/health/coronavirus/governor-mike-dewine-ohios-stay-at-home-order-extended-until-may-1/95-5c687939-2c07-4bc0-925b-91e44dfdd9ef
https://coronavirus.ohio.gov/wps/portal/gov/covid-19/dashboards
https://www.merriam-webster.com/dictionary/pandemic
https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section11.html

Floods
https://www.ncdc.noaa.gov/stormevents/

Hazardous Materials
https://data-oepa.opendata.arcgis.com/datasets/spills-and-releases-environmental-response-sincemay-2017/data

Invasive Species
https://www.wkyc.com/article/news/health/invasive-plant-in-ohio-can-severely-burn-skin/266719485
http://ohiodnr.gov/invasivespecies

APPENDIX E: SOURCES

Severe Summer Weather
https://www.fema.gov/disaster/796
https://sharpp.dps.ohio.gov/ohiosharpp/#

Severe Winter Weather
https://sharpp.dps.ohio.gov/OhioSHARPP/Documents/OhioMitigationPlan/2019/SOHMP%202019%20DRAFT%20(003).pdf

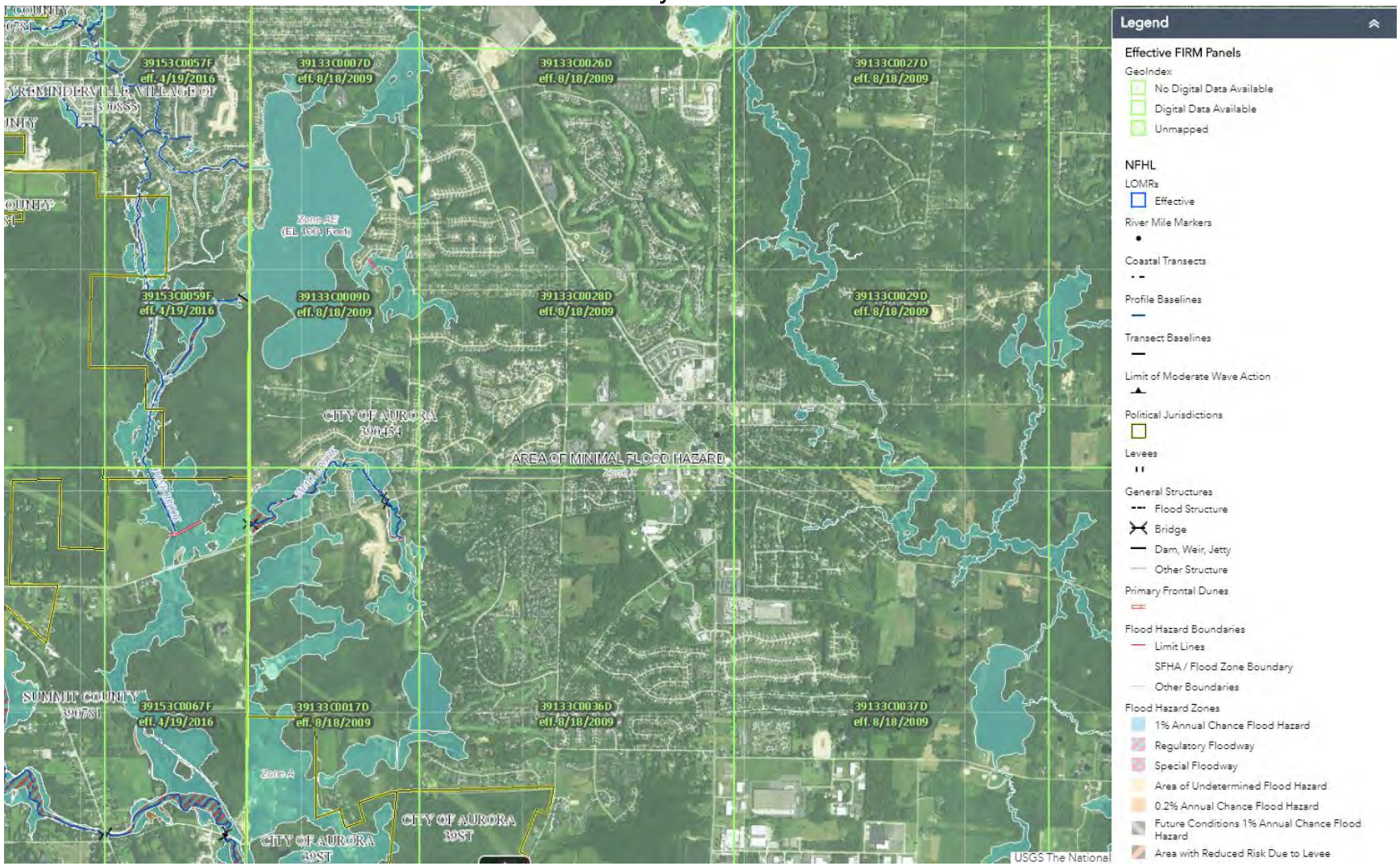
Tornado
https://www.ncdc.noaa.gov/stormevents/

Transportation
https://sharpp.dps.ohio.gov/OhioSHARPP/Documents/OhioMitigationPlan/2019/Full%20Copy.pdf
https://www.bts.gov/topics/national-transportation-statistics
https://www.planecrashmap.com/list/oh/
http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/HSIP/Shared%20Documents/2018%20Pedestrian%20Fatality%20Report.pdf

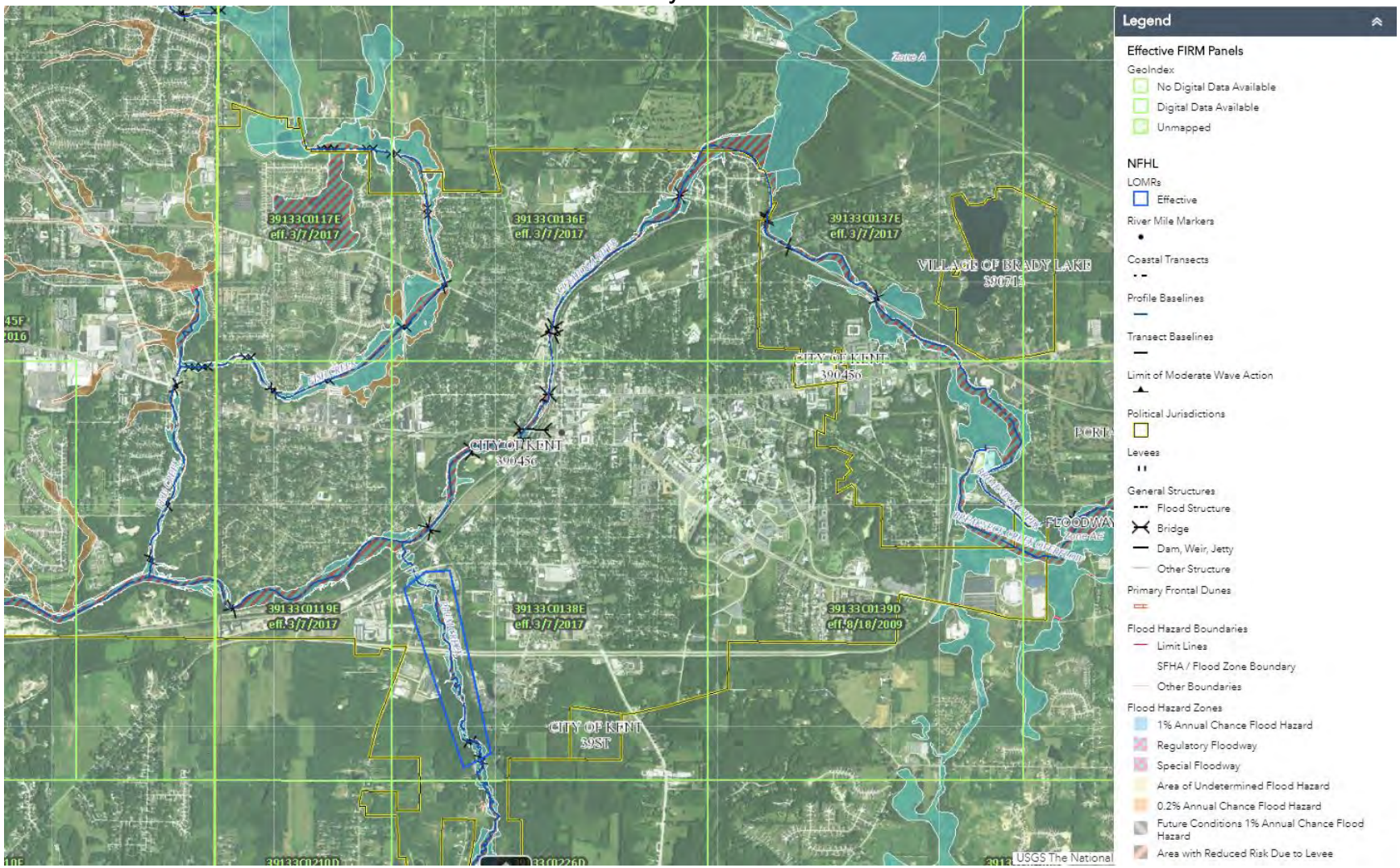
Appendix F: FEMA Flood Maps:
https://msc.fema.gov/portal/search?AddressQuery=Bucyrus#searchresultsanchor

Appendix F | FEMA Flood Maps

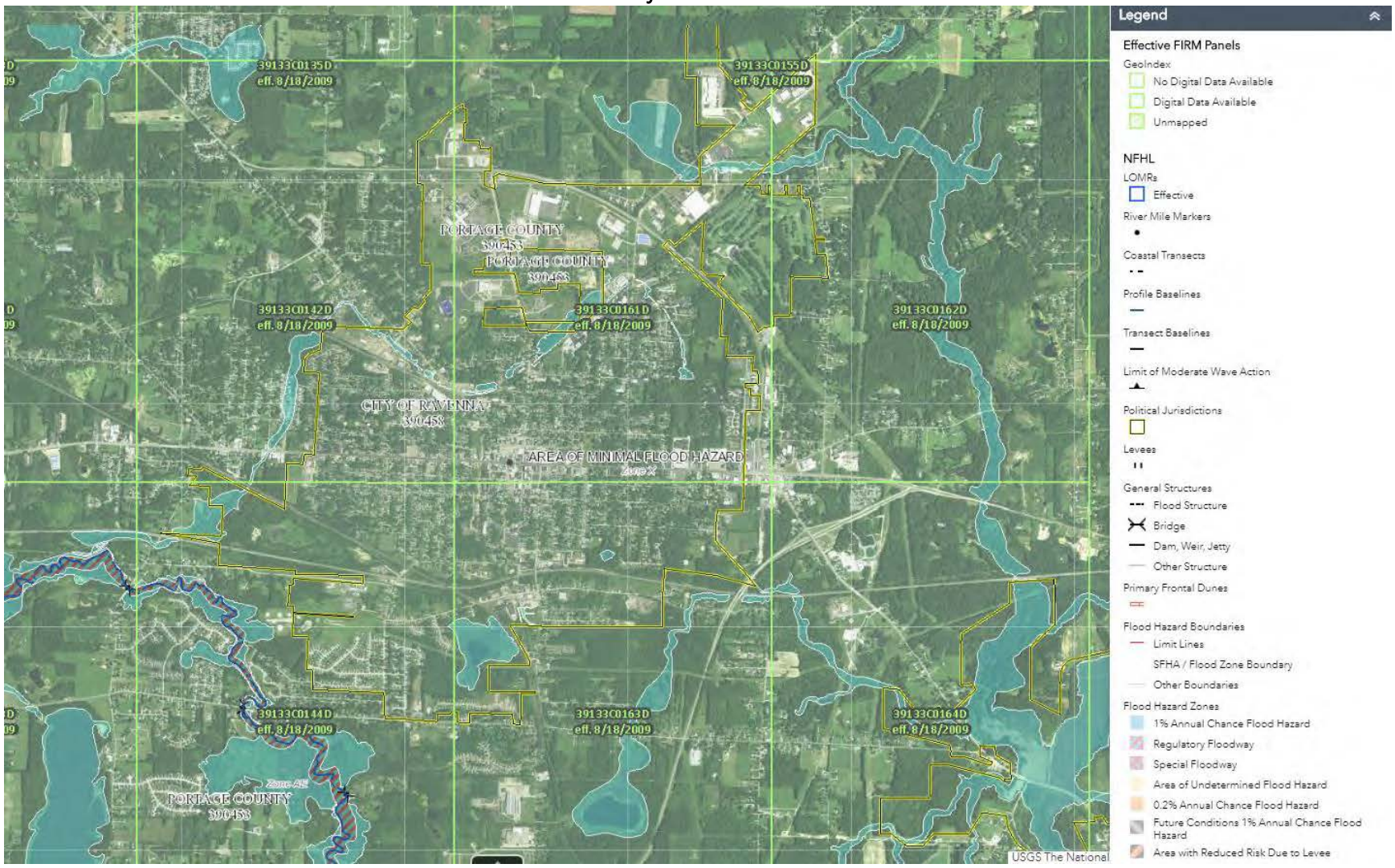
City of Aurora



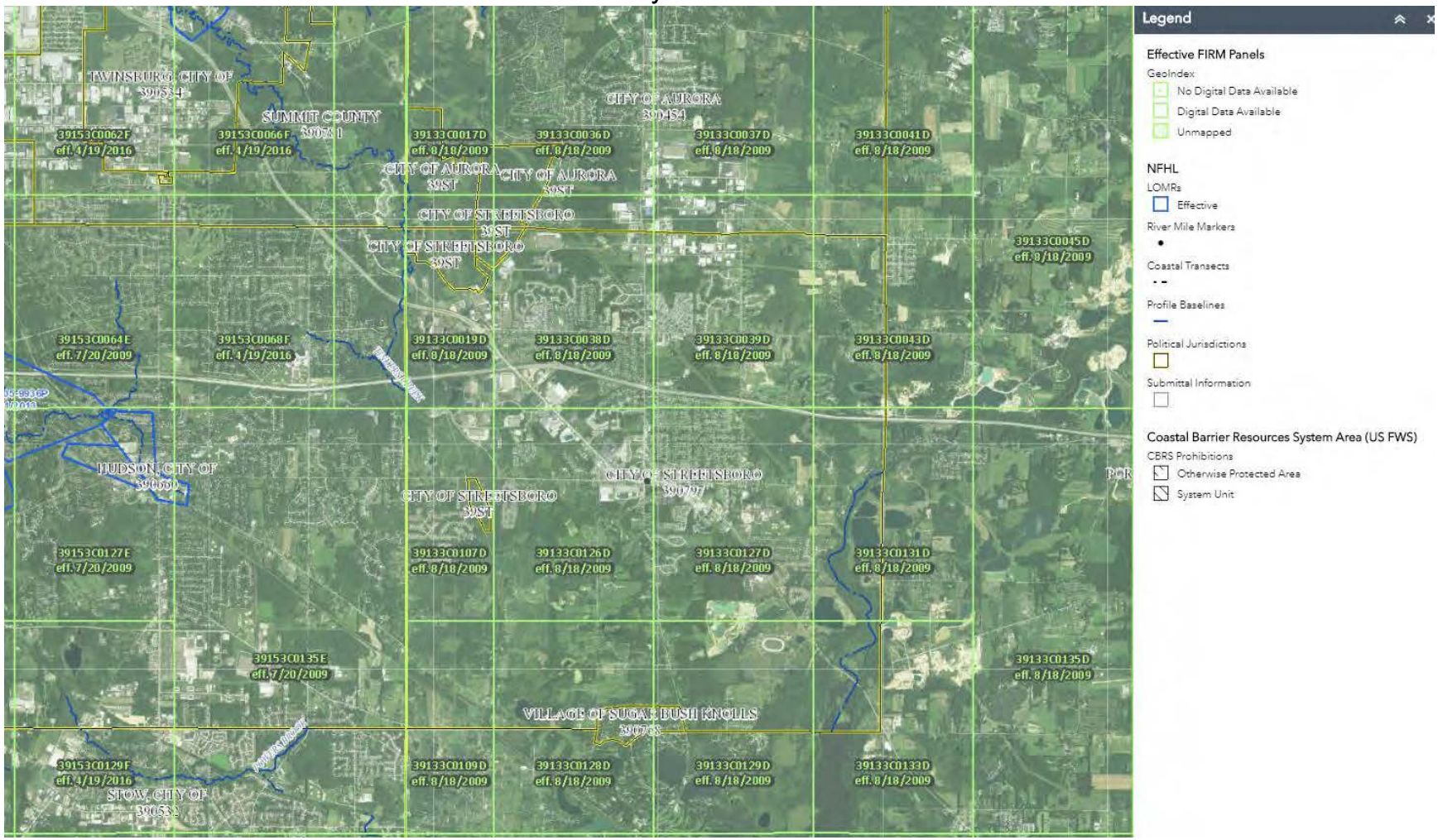
City of Kent


39133C0117E
eff. 3/7/2017
39133C0136E
eff. 3/7/2017
39133C0137E
eff. 3/7/2017
VILLAGE OF BRADY LAKE
390715
CITY OF KENT
390456
CITY OF KENT
390456
39133C0119E
eff. 3/7/2017
39133C0138E
eff. 3/7/2017
39133C0139D
eff. 8/18/2009
CITY OF KENT
39ST
USGS The National
Legend
Effective FIRM Panels
GeoIndex
No Digital Data Available
Digital Data Available
Unmapped
NFHL
LOMRs
Effective
River Mile Markers
Coastal Transects
Profile Baselines
Transect Baselines
Limit of Moderate Wave Action
Political Jurisdictions
Levees
General Structures
Flood Structure
Bridge
Dam, Weir, Jetty
Other Structure
Primary Frontal Dunes
Flood Hazard Boundaries
Limit Lines
SFHA / Flood Zone Boundary
Other Boundaries
Flood Hazard Zones
1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee

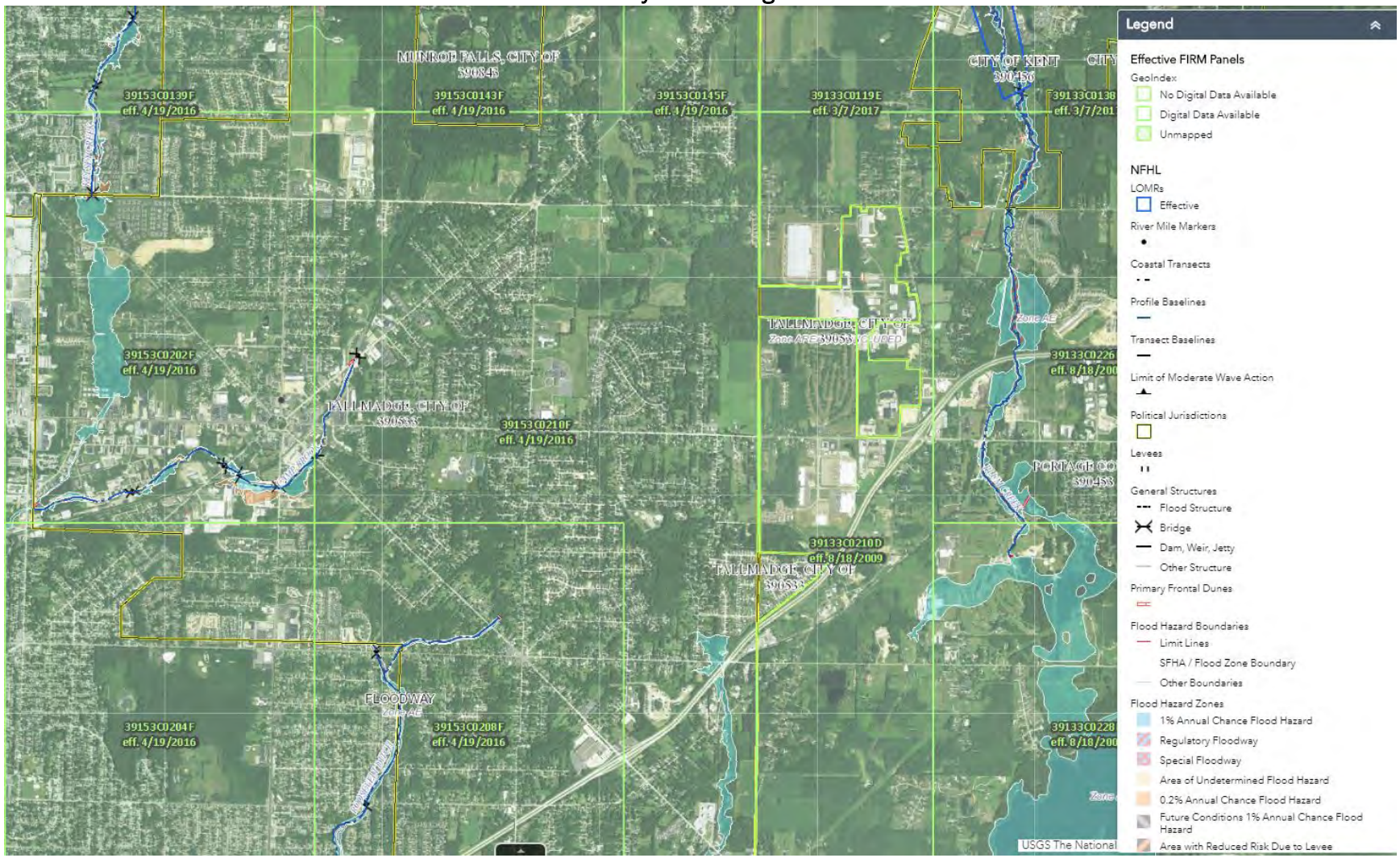
City of Ravenna



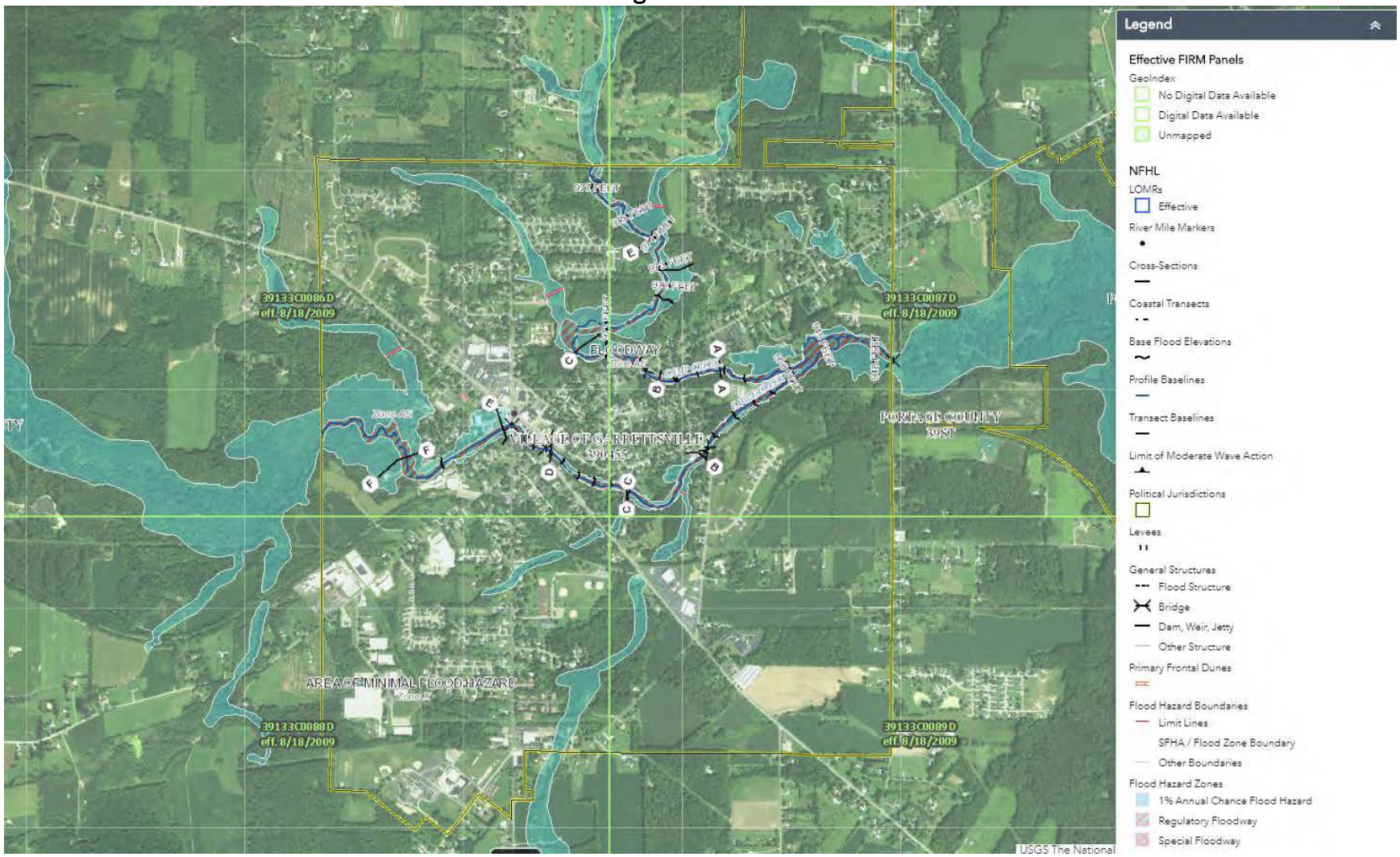
City of Streetsboro



City of Tallmadge

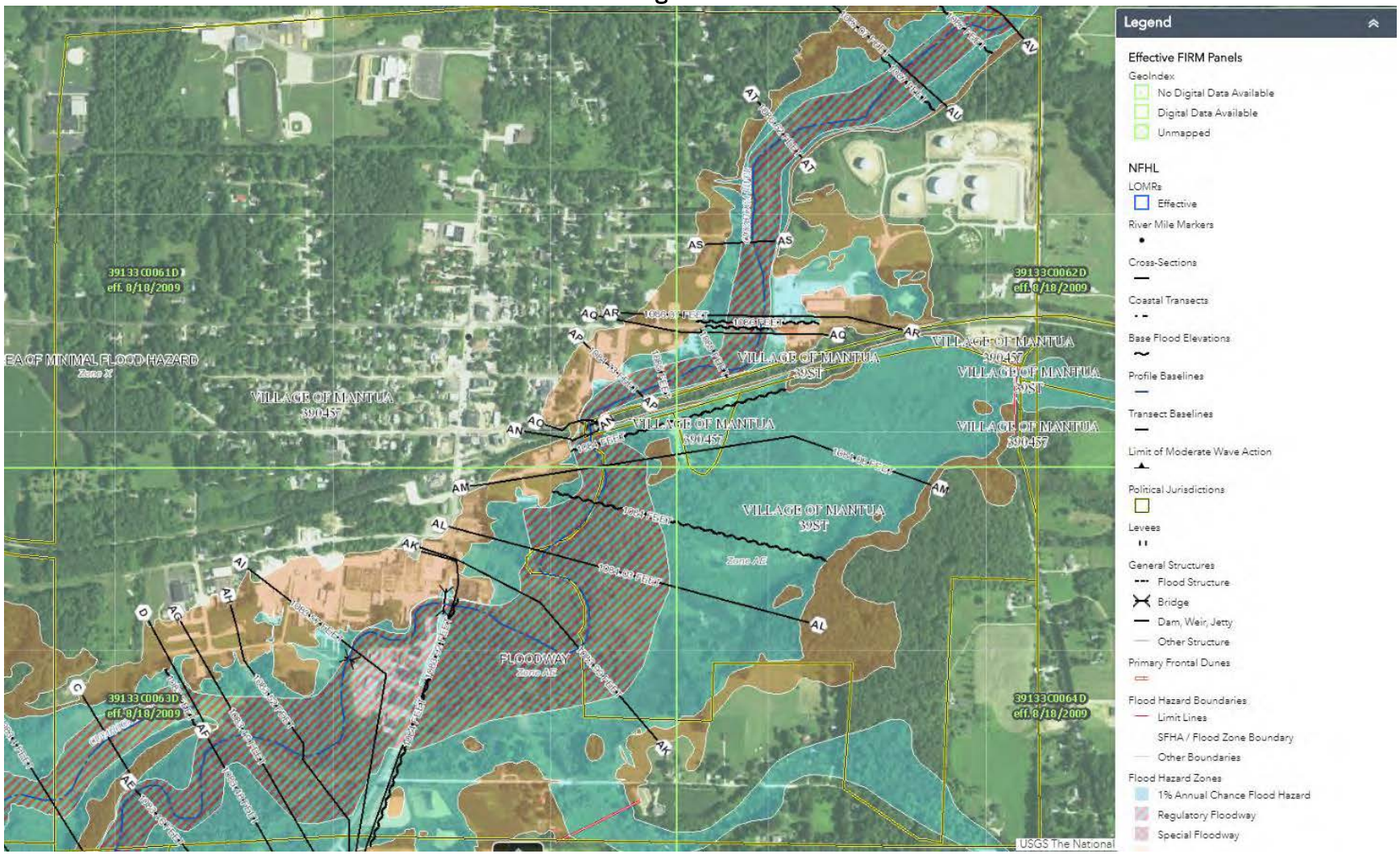


Village of Garrettsville

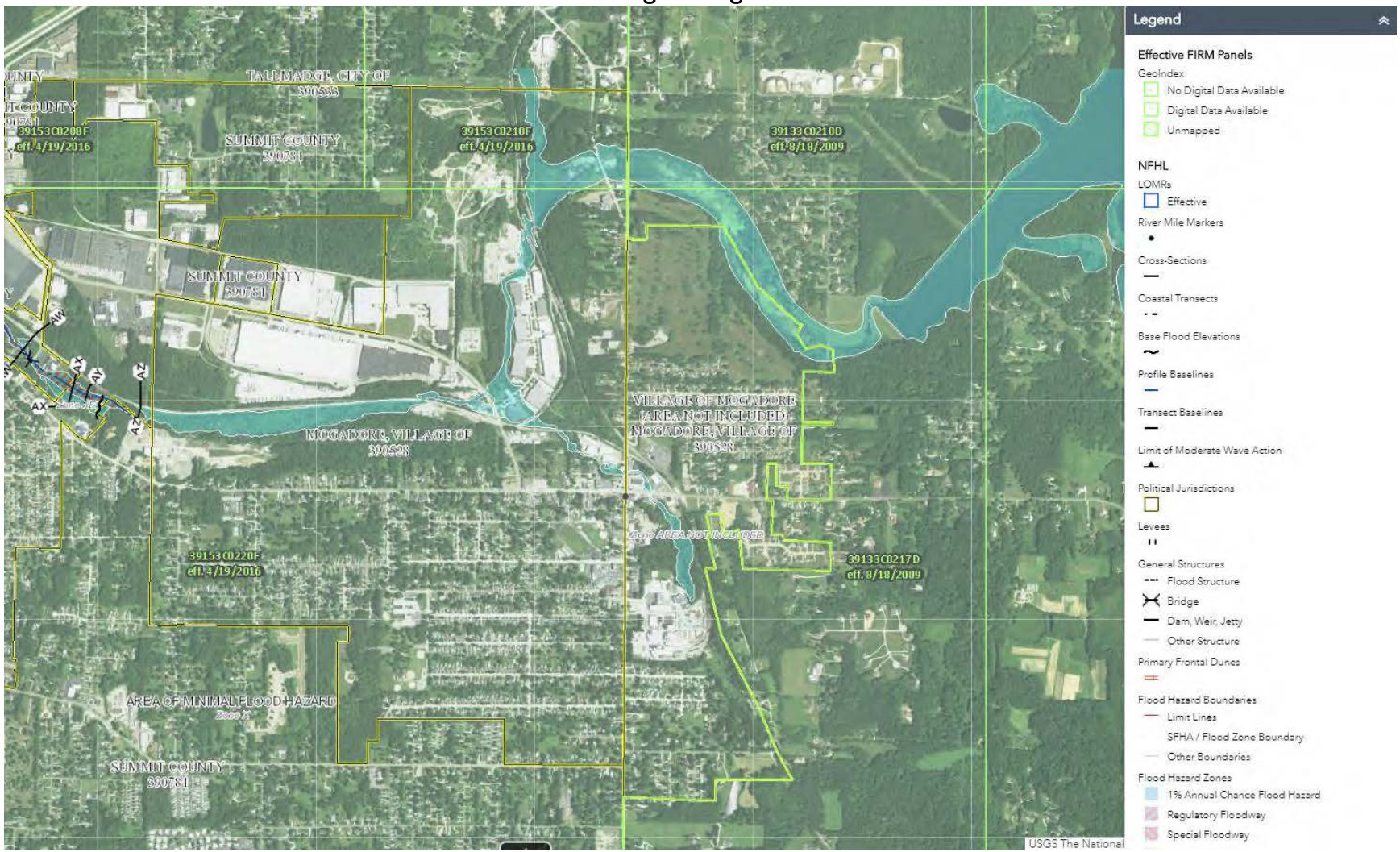


Village of Hiram

Village of Mantua

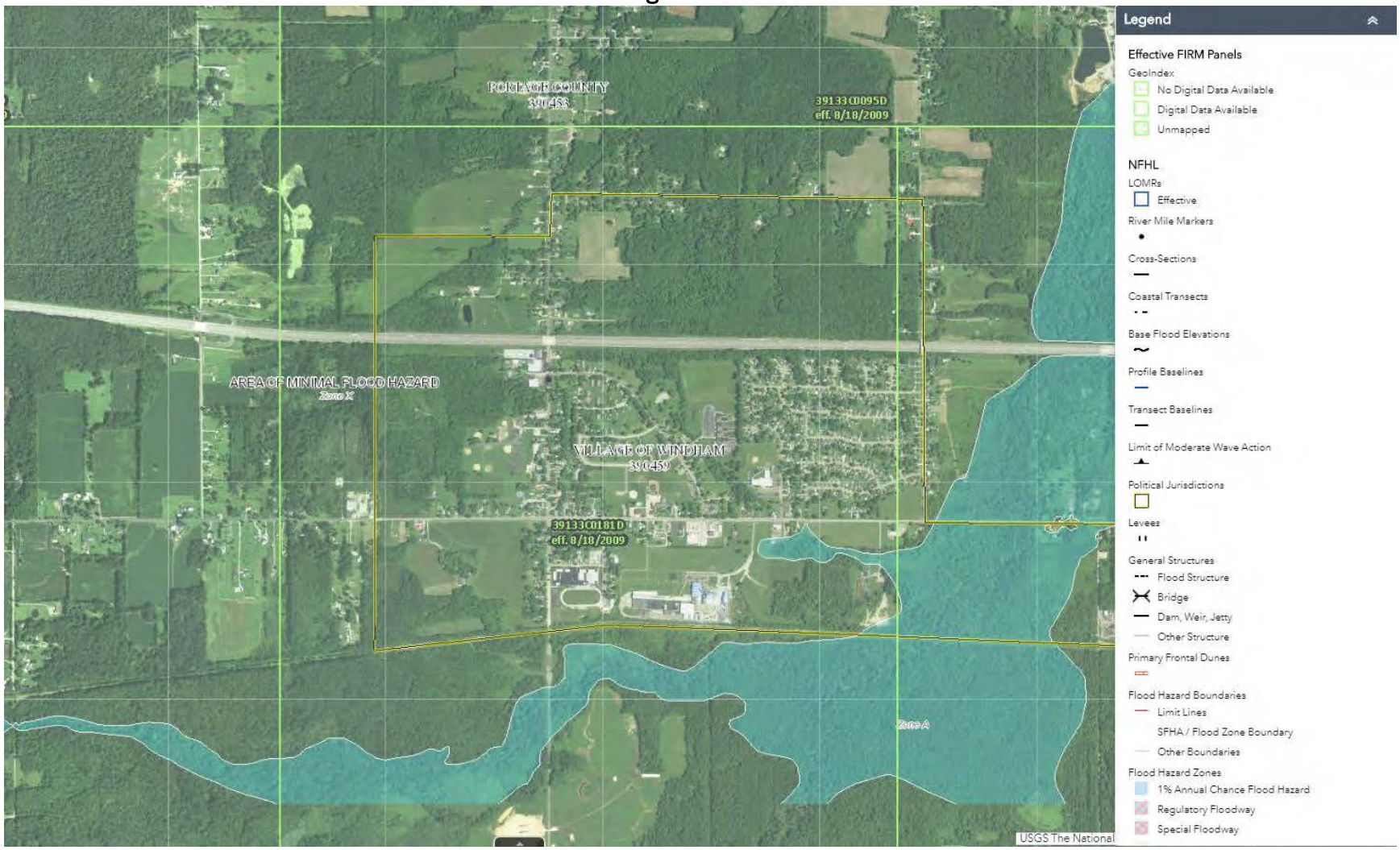


Village of Mogadore



Village of Sugar Bush Knolls

Village of Windham



Appendix G | Meeting Documentation

Planning Meeting 1

Record-Courier

Agency to discuss planning for disaster

Posted Feb 4, 2020 at 10:55 AM
Updated Feb 4, 2020 at 11:49 AM

Portage County Emergency Management Agency is inviting the public to take part in a meeting focused on planning for natural and man-made disasters from 5 to 6:30 p.m. Feb. 13 at Maplewood Career Center, 7075 Route 88 in Ravenna.

Sponsored by the Portage County Emergency Management Agency, the meeting will focus on updating the County Hazard Mitigation Plan. The plan is updated every five years so that the county and participating communities remain eligible for pre-disaster and post-disaster mitigation grant programs.

At this meeting, each potential natural, technological and man-made hazard will be reviewed to determine its current and possible threat to Portage County. The public's feedback is essential to provide input on any potential hazards and to rate the priority of the hazards that will be included in the next plan.

Email questions to Portage County EMA Director Ryan Shackelford at rshackelford@portageco.com.

CORE PLANNING COMMITTEE MEETING 1 ANNOUNCEMENT

Good Afternoon,

Portage County was recently awarded a Pre-Disaster Mitigation Grant to update our county's Hazard Mitigation Plan. Community input is critical to this plan's success and the FEMA approval process. As a stakeholder, we are asking you to participate as a member of the Core Planning Committee. Our first meeting will be held **Thursday, February 13, 2020 at 2:00 PM** in the Maplewood Career Center (7075 State Route 88, Ravenna, OH 44266). If you are unable to attend during work hours, you are also welcome to attend the public meeting at the Maplewood Career Center on **Thursday, February 13, 2020 at 5:00 PM.** It is very important that we representation from all of Portage County's jurisdictions.

Once our plan has gone through the FEMA approval process and has been adopted locally, we can apply for grant funding that could potentially cover 75% of the costs associated with those projects. Without an approved Hazard Mitigation Plan, we would lose our eligibility for future mitigation grant funding. **Municipalities, police and fire departments, schools, businesses, and the general public may receive funding for any mitigation strategy found in the approved and adopted plan update.**

Please RSVP to one of the meeting times by February 10, 2020 to rshackelford@portageco.com or (330) 297-360. As always, please let us know if you have any questions or if we can assist in any way. Thank you for supporting our project and we look forward to seeing you on February 13!

Ryan T. Shackelford
Director of Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Road
Ravenna, OH 44266

CORE PLANNING COMMITTEE MEETING #1

Thursday, February 13, 2020, 2:00 pm
7075 State Route 88, Ravenna, OH 44266

1. Introductions

2. Hazard Mitigation Overview

3. Progress Update

4. Committee Role & Action Items

5. Next Steps

HAZARD MITIGATION

Purpose of Hazard Mitigation

According to the Federal Emergency Management Agency (FEMA), hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards such as tornadoes, flooding, and winter and severe storms. Mitigation activities may be implemented prior to, during, or after an incident. However, hazard mitigation has been shown to be most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

Because of this, federal regulations were developed through the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 and the Disaster Mitigation Act of 2000, to provide for state, local, and tribal governments to undertake a risk-based approach to reducing risks to natural hazards through mitigation planning. Under the Disaster Mitigation Act of 2000, jurisdictions must have an adopted hazard mitigation plan to receive funds from the Federal Emergency Management Agency (FEMA) in the event of a disaster.

Types of Hazards

- Water
  - Flooding
  - Dam & Levee Failure
- Wind
  - Tornadoes
  - Damaging Winds
  - Hurricanes
- Storms
- Extreme Temperatures
- Drought & Wildfire
- Geology
  - Landslides
  - Mine Subsidence
  - Earthquakes
- Invasive Species
- Man-made
  - Hazardous Materials
  - Terrorism

Federal Requirements

To receive FEMA funding, hazard mitigation plans must be adopted by local jurisdictions, updated every 5 years, and include:

- Public participation and documented update process
- Existing conditions and demographics
- Major disaster declarations since the previous plan
- Risk assessments and vulnerability analyses for hazards
- Mitigation actions and their status
- Identified plan maintenance and updates

Planning Process

- **Milestone 1**: Project kickoff; gather data for existing conditions and demographics.
- **Milestone 2**: Public Meeting #1 will provide time for the community to review goals for the plan, rank potential hazards, and determine status of previous mitigation actions.
- **Milestone 3**: Burton Planning Services will perform risk assessments & vulnerability analyses and develop mitigation actions based on the feedback received from the first public meeting.
- **Milestone 4**: Public Meeting #2 will provide time for the community to review the proposed mitigation actions and rate actions based on relevance to local communities.
- **Milestone 5**: Burton Planning Services will prepare a draft plan based on community feedback and survey results.
- **Milestone 6**: The OEMA and FEMA will conduct reviews of the draft plan.
- **Milestone 7**: Once the plan has been approved by FEMA, the County and participating jurisdictions will adopt the plan.

To Participate: Download & complete surveys from the website (www.burtonplanning.com/portage-hmp) or go to links on the back of this page to fill out the surveys online.

Questions & Contact: For questions, please contact Ryan Shackelford, Director of Portage County Homeland Security and Emergency Management Agency, at (330) 297-3607 rshackelford@portageco.com.

SURVEYS

Goals Survey and Hazard Priority Survey

The Goals Survey reviews the goals from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to determine if they are still relevant and if any new goals should be added to the 2020 mitigation plan.

The Hazard Priority Survey seeks feedback on each potential hazard to determine which hazards should be included in the 2020 mitigation plan.

Link: https://www.surveymonkey.com/r/PortageCoGoals

2015 Previous Mitigation Action Status Survey

The 2015 Previous Mitigation Action Status Survey seeks feedback on the status of the mitigation actions included in Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan and asks if the same mitigation actions should be carried into the 2020 mitigation plan.

Link: https://www.surveymonkey.com/r/PortagePreviousActions

Hazards Overview

Dam Failure

There are ten Class I dams within or near Portage County. Dam failure is characterized by the rapid and uncontrolled release of impounded water. Failure of Class I dams is likely to result in loss of life or great economic damages.

Flooding

Flooding is caused by the overflow of inland water. Flash floods occur when rain water accumulates on impervious surfaces. Since 1996, there have been at least 26 flood events in Portage County.

Drought and Extreme Heat

Droughts occur when water levels drop. They can occur anywhere, and they increase the risks of flash floods, wildfires, and landslides. There has been at least one drought in Portage County since 2012.

Earthquakes

Earthquakes are caused by the breaking and shifting of rocks beneath the earth's surface. Minor earthquakes occur in Portage County, but there are no reported damages.

Tornadoes

Tornadoes usually occur during severe thunderstorms. Portage County has experienced at least 14 tornadoes since 1962.

Terrorism

There are five types of terrorism, including cyberterrorism, agroterrorism, biological terrorism, chemical terrorism, and an active aggressor. This includes cyberattacks on election systems.

Winter Weather

Winter storms can include extreme cold, freezing rain, ice, snow, high winds, or any combination of these conditions. Since 1996, winter storms have caused approximately $9,000,000 of property damage in Portage County.

Utility/Power Failure

Utility failure occurs when neighborhoods or communities lose access to electricity, gas, running water, or any other utility. Damage can be direct (downed power lines) or indirect (spoiled goods).

Severe Storms

Severe storms can include hail, damaging winds, and lightning. Rain storms that cause flooding and tornadoes are discussed in other hazards. Wind, lightning, and hail have caused more than $15 million of property damage in Portage County.

Hazardous Materials

Hazardous materials include the gas and oil industry, as well as spills at storage or processing facilities or spills along roadways during shipping. Spills from transit can originate from other counties.

Invasive Species

Invasive species are any species within Portage County that are not native to the area. These species can cause ecological or economic damage.

Epidemic

An epidemic is a disease, usually contagious, that recurs in a community and attacks a large number of people at the same time.

Transportation

Transportation issues include highway and air travel accidents. Pedestrian and bicycle related accidents are also included.

Landslides, Erosion, and Mine Subsidence

A landslide occurs when rocks, earth, or other materials move down a slope. Common causes include rain, floods, and development practices along slopes

Wildfire

Wildfires are fires that occur in the wilderness or countryside and spread quickly, especially during droughts.

Name & Organization: _____

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster.

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: _____

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	
2. Flooding	
3. Drought and Extreme Heat	
4. Earthquakes	
5. Tornadoes	
6. Terrorism	
7. Severe Winter Weather	
8. Infrastructure / Utility Failure	
9. Severe Summer Weather	
10. Hazardous Materials	
11. Invasive Species	
12. Transportation	
13. Epidemic	
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	
15. Wildfire	

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

PREVIOUS MITIGATION ACTIONS STATUS

As part of each Hazard Mitigation Plan, the County is tasked with developing a list of mitigation actions that can help prepare communities and their residents for hazards, as well as lessen the impact of these hazards.

As part of this process, the status of each mitigation action included in Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan needs to be determined.

In the following tables, enter your name and position and select one of the following status options for each mitigation action in your jurisdiction:

- Completed (indicate when the action was completed)
- Deleted (indicate why the action was deleted)
- Deferred (indicate why the action was deferred)
- Unchanged (indicate why the action remains unchanged)
- Ongoing (include percentage complete or description of progress – e.g. “Ongoing (20% Complete” or “Completed annually from 2014-2019”).

Please include remarks for each mitigation action for which you enter a status. Remarks should address:

- Completed: if the action was completed, when was it complete? Where was it enacted? Did it have the intended results? Did it achieve the goals outlined in the plan? What factors contributed to success?
- Not Completed: If the action was not completed, what were the barriers to implementation? For instance, was there a lack of political support, funding, staff availability, or other obstacle? Should the action be included in the updated mitigation strategy (yes or no)?

PORTAGE COUNTY

NAME: **POSITION:**

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015 - 12/1/2015	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015 - 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on “preparedness tips” for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

PREVIOUS MITIGATION ACTIONS STATUS

As part of each Hazard Mitigation Plan, the County is tasked with developing a list of mitigation actions that can help prepare communities and their residents for hazards, as well as lessen the impact of these hazards.

As part of this process, the status of each mitigation action included in Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan needs to be determined.

In the following tables, enter your name and position and select one of the following status options for each mitigation action in your jurisdiction:

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- Deleted (indicate why the action was deleted)
- Deferred (indicate why the action was deferred)
- Unchanged (indicate why the action remains unchanged)
- Ongoing (include percentage complete or description of progress – e.g. “Ongoing (20% Complete” or “Completed annually from 2014-2019”).

Please include remarks for each mitigation action for which you enter a status. Remarks should address:

- Completed: if the action was completed, when was it complete? Where was it enacted? Did it have the intended results? Did it achieve the goals outlined in the plan? What factors contributed to success?
- Not Completed: If the action was not completed, what were the barriers to implementation? For instance, was there a lack of political support, funding, staff availability, or other obstacle? Should the action be included in the updated mitigation strategy (yes or no)?

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

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Hazard Mitigation Overview

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Hazard Mitigation Overview

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- Goals:
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- Potential types of hazards include:
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  - Summer and Winter Storms
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Microhydro power dam, Seattle 2015

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Hazard Mitigation Overview

- The disaster response cycle

(1) Mitigation	(2) Preparedness	(3) Response	(4) Recovery
• Well-before a disaster • Hazard Mitigation Plan	• When a disaster is imminent • Emergency Operations Plan	• During a disaster • Short-term emergency aid and assistance	• Post-disaster • Disaster Recovery Plan

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- Robert T. Stafford Disaster Relief and Emergency Assistance Act, 1988
  - Presidential disaster declarations trigger federal assistance via FEMA.
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  - Legal basis for FEMA's state, local, and tribal mitigation planning requirements.
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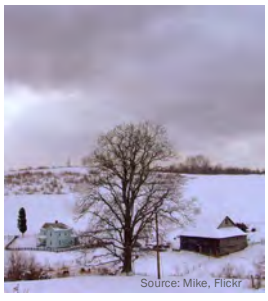
Source: Mike, Flickr

8

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Process & Schedule

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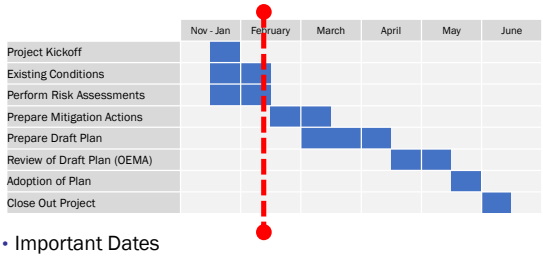
Process & Schedule



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Core Planning Committee

Core Planning Committee Role

- Overview
  - ○ Provide local knowledge & data as needed, including history, demographics, spatial information.
  - ○ Help identify potential hazards based on previous experience & prioritize based on risk.
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2. Complete surveys
3. General feedback

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    - Goals guide the Plan and inform the development of specific mitigation actions.
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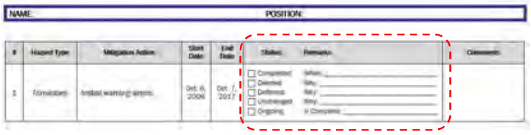

Next Steps

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- All Participating Jurisdictions & General Public:
  - Complete the goals, hazard priority, and existing mitigation action surveys
- Project Team
  - Finalize critical facilities lists
  - Perform risk assessments & vulnerability analyses
  - Develop draft mitigation actions
  - Meeting #2 preparation
- Next meeting - April 16, 2020
  - Discuss risk assessments, mitigation actions, prioritize

QUESTIONS?

PORTAGE COUNTY
HAZARD MITIGATION PLAN

Core Planning Committee Meeting #1 | February 13, 2020

Contact Information:

Patricia Corley
Administrative EM Specialist
Main: (330) 297-3609
pcorley@portageco.com

Kimberly Burton, BPS President
Main: (614) 392-2284
Mobile: (614) 975-8668
kburton@burtonplanning.com

Source: Wikipedia

CORE PLANNING COMMITTEE MEETING #1

Thursday, February 13, 2020, 2:00 pm
7075 State Route 88, Ravenna, OH 44266

SIGN-IN SHEET

Name	Title	Phone	Email	Employer / Community Represented
JOHN FESTA	MANTUA TWP TRUSTEE	3302744144	JFESTA @ MANTUATOWNSHIP.OHIO	MANTUA TWP
Tim Contanto	~~Storm~~ Compliance officer	330 283-4856	tim.contanto@ravennaoh.org	City of Ravenna
RANDY ROBERTS	DIRECTOR - CHIEF BUILDING OFFICAL	330-297-3534	RROBERTS@PORTAGECO.COM	PORTAGE COUNTY
DAVE MCSHANE	DOG warden	330 297-6924	DMCINTYRE@portageco.com	portage
Joseph Bodnar	Dep. Director Planning Dept.	330 253 7123	jbodnar@portageco.com	Portage Co Plan
Brian Byard	Chief of Police	216-701-9318	byardbe@aroma.com	City of Aroy
Mickey Marazzi	Por. Co. Eng.	330-296-6411	mmarazzi@portageco.com	Self
MELANIE BAKER	City of KENT	330-351-5404	mbaker@kent-ohio.org	KENT
JAMES Bierlair	PSWCD	332 235-6807	Jbierlair@Portageswcd.org	Portage Co.
ELVIN W. PINCKNEY	ENVIRONMENTAL SPECIALIST	614 214-3234	EPinckney@BurtonPlanningSvs.	BPS
Bob Finney	city Ravenna ENGINEER	330-296-5666	bob.finney@ravennaoh.gov	City of Ravenna
Alicia Beattie	chagrin RW watershed Partners	440 975 3870	abeattie@crwp.org	Associate Director
Geoff Cleveland	Ravenna City Fire Chief	330-297-5735	geoffrey.cleveland@ravennaoh.gov	Ravenat

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Name	Title	Phone	Email	Employer / Community Represented
DAN FYNES	Dir. CAMPUS SAFETY	330 569-5110	Fynesda@hiram.edu	HIRAM College
John Tosko	Kent Fire Chief	330 673 8814	Toskaj@kent-ohio.org	Kent
Joe Reichli	GIS	330 622-3790	jreichli@portage.co	Auditor
MATT Mohler	FAC. Dir.	330-414-8574	mmohler@deltasystemsinc.com	DELTA SYS
SUSAN LILLEY	PRESIDENT BLACK BROOK CONS.	330 815 4333	SUELILLEY28@GMAIL.COM	BLACK BROOK
FRANK SEMAN	MAYOR RAVENNA	330 221 8915	fcseman@aol.com	RAVENNA
Mark Bennett	Water Prot.	330-208-3024	mbennett@akron ohio.gov	Akron
DON HANNA	ASST. CHIEF	330-730-4753	DFH298@aol.com	CHARLESTOWN FIRE
David Burnes	Chief	330-995-9138	burnesd@aurorachi.com	Aurora FD
Ben Stasik	Deputy Chief	330-697-0444	bstasik@tallmadge-ohio.org	Magadore Fire Tallmadge Fire /
LARRY D. JENKINS JR	ASSISTANT COUNTY ENGINEER	330-697-3186	LJENKINS@PORTAGECO.COM	PORTAGE CO. ENGINEER
Alex Burt	Summit EMA	330-~~70~~643-8294	aburt@summitoh.net	Summit Co.
Kevin Buettner	Assoc. Planner	614-620-9228	Kbuettner@burtonplanning.com	BPS

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SIGN-IN SHEET

Name	Title	Phone	Email	Employer / Community Represented
Tommy Smart	EMA Director	330-643-2558	tsmart@summitohmet	Summit County EMA
Mark Kozak	Fire Chief	330 297 2192	Mark.Kozak@RavennaTownship.com	Ravenna Township
Robert Walker	PHED Coord.	330-297-9199 x112	RWalker@portageHealth.net	RW
Gene Roberts	PCWR	330-348-3958	groberts@portageco.com	PC
Ed Grecol	EM Coordinator	330-607-6024	Edward.grecol@uhhosp.tais.org	University Hospitals
Lloyd Algen	CIO	330-297-3588	LALGEN@PortageCo.com	Portage County
Lori Calcei	County Recorder	330-297-3557	lcalcei@portagecoc.com	Township
Kathleen Clyde	Commissioner	330-296-3600	kclyde@portageco.com	Portage Co
Lynn Whittlesey	Twp. Trustee	330-947-2187	whitt11000@skcglobal.net	Atwater Twp.
Noah Culbertson	PCEMA intern	330-310-4749	ntc15@zips.uakron.edu	PCEMA
Alex Latina	Env. Coordinator	330-221-0205	alatina@gpdgroup.com	GPD
Christine Craycroft	E.D.	330 297 7728	ccraycroft@portagepark district.org	Portage Park District

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Thursday, February 13, 2020, 2:00 pm
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SIGN-IN SHEET

Name	Title	Phone	Email	Employer / Community Represented
Luan Nguyen	State Hazard Mitigation Planner	614 799 3531	LKnguyen@dps.ohio.gov	OEMA
RUAN SHACKLEFORD	DIRECTOR	330-297-3602	PCORLEY@PORTAGECO.G	OCMA
BILL Buckbee	ASST. DIRECTOR KSU	330-672-3070	Wbuckbee@KENT.ST.	KENT ST.
Patricia Corley	Admin EM Specialist	(330)297-3609	pcorley@portageco.com	PC

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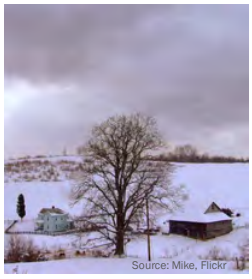
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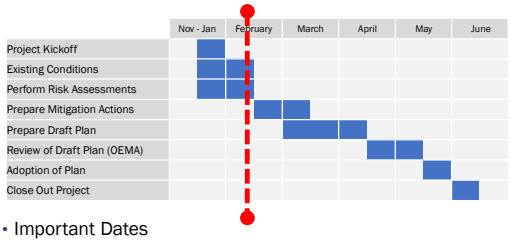

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PORTAGE COUNTY
HAZARD MITIGATION PLAN

Public Meeting #1 | February 13, 2020

Contact Information:

Patricia Corley
Administrative EM Specialist
Main: (330) 297-3609
pcorley@portageco.com

Kimberly Burton, BPS President
Main: (614) 392-2284
Mobile: (614) 975-8668
kburton@burtonplanning.com

PUBLIC MEETING #1

Thursday, February 13, 2020, 5:00 pm
7075 State Route 88, Ravenna, OH 44266

SIGN-IN SHEET

Name	Title	Phone	Email	Employer / Community Represented
Patrick Morley	~~Admin~~ EM SPEC	330.297.3609	pcorley@portageco.com	PC
Ryan Shackelford	PC EMA	"		PC
NOAH Culbertson	PC EMA	"		PC
Denise Smith	Citizen	330-671-8254	civilchief01@gmail.com	
John B. Kovalick	TRUSTEE ATWATER TWP	(330) 842-1819	liljona@AOL.com	ATWATER
CHRIS SANCHEZ	CHIEF	330-527-4100	COMMUNITYEMS@NEO.RR.COM	COMMUNITY EMS DISTRICT
ROBERT C. WIGGINS	President	330.289.8185	rwigginstns@hotmail	MUZZY LAKE, INC Sapwood Shores, INC
Valerie Nahdk	resident	330-221-0287	Valerie MN2@aol.com	Randolph

Planning Meeting 2

From: Ryan Shackelford
Subject: Portage County Hazard Mitigation Planning - Resumed
Date: Wednesday, July 8, 2020 9:02:26 AM

Good morning.

Portage County was recently awarded a Pre-Disaster Mitigation Grant to update our County's Hazard Mitigation Plan. This update is required by FEMA every five (5) years to remain eligible for funding for projects. Municipalities, police and fire departments, schools, businesses, and the general public may receive funding for any mitigation strategy found in the approved and adopted plan update. It is imperative that all townships, cities and villages participate in this process. Community input is critical to this plan's success (and the FEMA approval process).

Due to the COVID-19 Pandemic, the next Planning Meeting will be conducted via Zoom.

Core Planning Committee Meeting 2 Thursday, July 23, 2020 at 2:00 PM	**Public Meeting 2** Thursday, July 23, 2020 at 5:00 PM
Join Online https://zoom.us/j/99082901617?pwd=ekczWVgrKzRTbWYzOC8vZ2t6VlNDZz09 Meeting ID: 990 8290 1617 Password: portage123 **Join via Phone** Phone Number: +1 (929) 205-6099 Meeting ID: 990 8290 1617 Password: 423532	**Join Online** https://zoom.us/j/97217021958?pwd=bmRzRjR4cGE1UHhRQTZvWGUySkZldz09 Meeting ID: 972 1702 1958 Password: portage123 **Join via Phone** Phone Number: +1 (301) 715-8592 Meeting ID: 972 1702 1958 Password: 104580

In order to update you on the planning process, we have prepared a presentation recording and attached surveys that are needed from each jurisdiction. Please review these materials and complete the surveys from Meeting 1 if you have not done so already. You can also review all materials from the first meeting online at www.burtonplanning.com/portage-hmp. Note: in the 3rd tab "Meeting 1 Materials" you'll see Survey 3 that includes actions that were entered by the County and each village, city and/or township. While townships are generally encompassed by the County, municipality participation is mandatory by FEMA. Please review this section specifically. If you are unable to participate in the 2PM meeting, please join us for the 5PM.

Many of you may wonder why you have been asked to participate in this process. Updating the Hazard Mitigation Plan every five years allows us to identify opportunities to lessen the potential impacts from disasters and also allows us to evaluate projects that have been completed during the past five-year cycle. All possible projects are identified by YOU, our community leaders. This can include homes and businesses in floodplains, within watersheds, along rivers and streams that are repetitively impacted by flood events. Further, it can include addressing flash flooding from severe rain events and enhanced storm water engineering, building structures above base flood elevation, removing structures into green space/community gardens or even tornado shelters! There are many types of projects available if they meet eligibility. Once our plan has gone through the FEMA approval process and has been adopted locally, we can apply for grant funding that could potentially cover 75% of the costs

associated with those projects.

As always, please let us know if you have any questions or if we can assist in any way.

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH 44266
rshackelford@portageco.com
Office: 330-297-3607
FAX # 330-297-4569

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Portage Prepares: https://www.co.portage.oh.us/portage-prepares
Facebook: https://www.facebook.com/PortagePrepares
Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

Anna Van Der Zwaag

From: Ryan Shackelford <RShackelford@portageco.com>
Sent: Wednesday, July 22, 2020 3:14 PM
Subject: Portage County Hazard Mitigation Planning - Resumed

Good afternoon.

This is a friendly reminder that we have our 2nd round of mitigation planning meetings tomorrow. If you are unavailable for the 1st planning meeting at 2pm, please join us for the 2nd public meeting at 5pm. All meeting materials can be found at http://burtonplanning.com/portage-hmp/ under the "meeting 2 materials tab". This includes tomorrows agenda, presentation and fillable surveys for each representative; whether an individual department/agency, the public or community. I want to thank everyone who can join us tomorrow as the process is very important for Portage County, it's residents and local communities. Have a great afternoon.

Ryan Shackelford
Director, Portage County OHS/EM

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Sent: Wednesday, July 08, 2020 9:02 AM
Subject: Portage County Hazard Mitigation Planning - Resumed

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Facebook: https://www.facebook.com/PortagePrepares
Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

PLANNING MEETING #2

July 23, 2020 at 2:00 PM & 5:00 PM
Zoom

1. Introductions & Sign-In via SurveyMonkey or Email
    a. Online: https://www.surveymonkey.com/r/PortageSignIn2
    b. Email: Send your name, email, phone, title, employer, and meeting attended to avanderzwaag@burtonplanning.com or pcorley@portageco.com.

2. Hazard Mitigation Overview

3. Progress Update

4. Survey Results

5. Committee Role & Action Items
    a. Complete Meeting 1 Surveys if you have not yet done so:
        i. Goals: https://www.surveymonkey.com/r/PortageCoGoals
        ii. Hazard Priorities: Combined with Goals Survey on SurveyMonkey
        iii. Previous Mitigation Actions: https://www.surveymonkey.com/r/PortagePreviousActions

    b. Complete Meeting 2 Survey
        i. Mitigation Action Scoring Matrix: https://www.surveymonkey.com/r/PortageScoringMatrix

6. Next Steps

Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Road
Ravenna, OH 44266
(330) 297-3607

July 6, 2020

To Whom it May Concern:

The Portage County Hazard Mitigation Plan is due for updating. The Hazard Mitigation Plan addresses threats from potential hazards and identifies possible strategies and projects to reduce the impacts, protect people and property, and reduce or eliminate long-term risk. It is necessary to update the Plan every five years so that the County and participating communities remain eligible for pre-disaster and post-disaster mitigation grant programs.

Public participation is a critical component of a successful and comprehensive update. The Portage County EMA will be hosting a virtual public meeting on **Thursday, July 23, 2020 at 5:00 PM via Zoom**. Members of the public can join the virtual GoToMeeting using the following links and phone numbers:

Public Meeting 2 Thursday, July 23, 2020 at 5:00 PM
Join Online https://zoom.us/j/97217021958?pwd= bmRzRjR4cGE1UHhRQTZvWGUySkZIdz09 Meeting ID: 972 1702 1958 Password: portage123 **Join via Phone** Phone Number: +1 (301) 715-8592 Meeting ID: 972 1702 1958 Password: 104580

Attendees will have an opportunity to identify mitigation projects to reduce or eliminate disaster-related losses. The public's feedback is essential to provide input on any potential hazards and to rate the priority of the hazards that will be included in the next plan.

Meeting materials will be made available on the project website (www.burtonplanning.com/portage-hmp).

Signed,

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH, 44266
rshackelford@portageco.com
Office: 330-297-3607
Fax: 330-297-4569

MITIGATION ACTION SCORING MATRIX: FREQUENTLY ASKED QUESTIONS

Question: **Where can I access the survey?**

Answer: You can obtain the survey by visiting the project website at www.burtonplanning.com/portage-hmp. Once there click on the "Meeting 2 Materials" tab. There are three versions:

1. Printable (print, complete by hand, and fax/mail/email to County EMA)
2. Fillable (download, complete using Adobe, and email to County EMA)
3. Online Survey: https://www.surveymonkey.com/r/PortageScoringMatrix

Question: **What is the purpose of this survey?**

Answer: The purpose of this survey is to collect feedback from key stakeholders and members of the public regarding projects that can be implemented in your communities. This feedback will provide the information necessary to create a prioritized list of projects for Portage County and each jurisdiction within the County.

Question: **What if I am unsure of whether a project is applicable to my jurisdiction?**

Answer: If you are unsure of whether a project is applicable to your jurisdiction, please indicate "yes" anyway and go ahead and score the action to the best of your knowledge. You can then indicate "unsure" in the comments box. Plan authors will defer to key stakeholders and the Portage County EMA for the final decision.

Question: **What if I don't know the appropriate score/ranking for one or more of the categories?**

Answer: If you aren't sure how to score/rank one of the categories but you think the project should be completed, simply give it a score of "3". Please DO NOT leave it unscored.

Question: **I have a question that is not included on this FAQ. Who can I contact?**

Answer: Please contact the Portage County EMA or Burton Planning Services with any questions:

Patricia Corley
Administrative EM Specialist
Main: (330) 297-3609
pcorley@portageco.com

Anna van der Zwaag
Associate Planner
Main: (614) 392-2284
avanderzwaag@burtonplanning.com

MITIGATION ACTIONS SCORING MATRIX

Purpose

As part of the hazard mitigation planning process, communities are asked to identify specific projects and activities (mitigation actions) that will help their communities achieve the long-term outcomes related to specific hazards. The status of each previously identified mitigation action is reviewed during the Hazard Mitigation Planning Process to determine the progress being made towards the County's hazard-specific goals. New mitigation projects and actions are also identified in this process.

The purpose of the Mitigation Actions Scoring Matrix is to determine which mitigation actions are relevant to each of the communities within Portage County and to develop a corresponding action plan that describes how the mitigation actions will be implemented. Scores collected from this Mitigation Actions Scoring Matrix will be used to decide how the mitigation actions will be prioritized, administered, and incorporated into Portage County's existing planning mechanisms.

Instructions

To complete this matrix, please review each proposed mitigation action and indicate if it is applicable to your jurisdiction. If it is applicable, score it from 1-5 for each category described below. For each category, a rating of 1 is the lowest score, a rating of 3 is neutral/unsure, and a rating of 5 is the highest score.

1. **Applicable to your jurisdiction?** – **Write Yes or No** – to indicate if you think this mitigation action is applicable to your community or jurisdiction. If Yes, fill out the remaining columns; if No, do not fill out the remaining columns.
2. **Cost Effective** – **Rank 1 – 5** – the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.
3. **Technically Feasible – Rank 1 – 5 –** the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
4. **Environmentally Sound – Rank 1 – 5 –** the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.
5. **Immediate Need – Rank 1 – 5 –** whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.
6. **Risk Reduction – Rank 1 – 5 –** the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

In addition, if there are any mitigation actions that are not listed that should be included, please add them, and score them on the last page. We encourage you to consider regularly occurring problems for each hazard listed below and suggest mitigation actions for these problems. You may also list regularly occurring problems within your community without suggesting a mitigation action.

Each action is associated with a goal of the hazard mitigation plan. These goals are located on the back of this page for your reference as you complete this survey.

NAME:	JURISDICTION:

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Multiple Hazards								
1	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Previous							
2	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Previous							
3	Support local agency efforts to complete independent study NIMS training online.	Previous							
4	Create/update local emergency action plans (EAPs) as required by NIMS.	Previous							
5	Determine a schedule by which emergency support functions should be updated.	Previous							
6	Revisit emergency support functions update needs list and provide documentation.	Previous							
7	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Previous							
8	Continue damage assessment training throughout the County and provide documentation.	Previous							
9	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Previous							
10	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Previous							

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
11	Continue to push information on new emergency communications onto social media.	Previous							
12	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	Previous	Hiram Only						
13	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.	Previous							
14	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Previous							
15	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Previous							
16	Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)	New							
17	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	New							
18	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New							
19	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New							
20	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	New							

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
			Dam Failure						
21	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Previous							
22	Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).	Previous	Aurora Only						
			Drought & Extreme Heat						
23	Encourage or mandate the use of local plants on public property (xeriscaping).	New							
24	Develop of list of criteria that triggers drought-related activities when met.	New							
25	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	New							
26	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	New							
			Earthquakes						
27	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	New							
			Epidemic						
28	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	New							
			Flooding						
29	Enhance wetland buffer requirements to help protect water quality.	Previous							

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
30	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Previous							
31	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Previous							
32	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Previous							
33	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	Previous							
34	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Previous							
35	Implement corrective measures identified in the above actions.	Previous							
36	Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.	Previous							
37	Identify funding for cleaning and maintaining ditches and storm waterways.	Previous							
38	Clean and maintain ditches according to the determined cause.	Previous							
39	Fix storm pipes to improve stormwater management.	Previous							
40	Raise roadway profiles above flood elevation.	Previous							
41	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Previous							

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
42	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	New							
43	Require that floodplains be kept as open space.	New							
44	Complete a stormwater drainage study for known problem areas.	New							
45	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	New							
	Hazardous Materials								
46	Continue to review Tier II hazard materials reports as they are submitted.	Previous							
47	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Previous							
48	Review and update County Commodity Flow Study.	New							
	Infrastructure & Utility Failure								
49	Purchase and install backup generators for public buildings and critical facilities.	New							
	Invasive Species								
50	Complete an ecological and economic impact study for local and nearby invasive species.	New							

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
				Landslides, Erosion, and Mine Subsidence					
51	Use GIS to identify and map landslide risk areas.	New							
52	Compile a complete list of any underground mines in the County.	New							
53	Limit or prevent development in identified risk areas.	New							
54	Acquire and demolish or relocate at-risk properties and infrastructure.	New							
				Severe Summer Weather					
55	Post warning signs at local parks, county fairs, and other outdoor areas.	New							
56	Install and maintain surge protection on critical electronic equipment.	New							
57	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	New							
58	Convert traffic lights to mast arms.	New							
				Severe Winter Weather					
59	Assess trees for their potential to injure people or damage property in public places.	Previous							
60	Ensure the development and enforcement of building codes for roof snow loads.	New							

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61	Use snow fences or "living snow fences" (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	New							
62	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	New							
63	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	New							
64	Plan for and maintain adequate road and debris clearing capabilities.	New							
	Terrorism								
65	Work with local and State law enforcement officials to identify risk areas in the County.	New							
66	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	New							
67	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	New							
	Tornadoes								
68	Require construction of safe rooms in new schools, daycares, and nursing homes.	New							
69	Conduct tornado drills in public buildings.	New							

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70	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	New							
71	Distribute tornado shelter location information.	New							
				Transportation					
72	Complete a full transportation study to identify risk areas and transportation behaviors.	New							
				Wildfire					
73	Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.	New							
74	Routinely inspect the functionality of fire hydrants and provide documentation.	New							
75	Develop a vegetation management plan to reduce wildfire risk.	New							
76	Ensure that buildings have fire extinguishers and fire detectors installed.	New							

Additional Mitigation Actions

Mitigation Action	Hazard	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)

PORTAGE COUNTY HAZARD MITIGATION PLAN

Planning Meeting #2 | July 23, 2020

- Please Sign In via SurveyMonkey: https://www.surveymonkey.com/r/PortageSignIn2
- OR email avanderzwaag@burtonplanning.com / PCorley@portageco.com with your name, email, phone, title, employer, and meeting attended.
- OR text 614-406-7775 with your name, email, phone, title, employer, and meeting attended.
- OR type your name, email, phone, title, employer into the chat

Introductions

- Portage County EMA
- BPS Project Team
  - Kimberly Burton, P.E., AICP CTP, LEED AP ND, Project Manager
  - Rich Roths, AICP, Hazard Mitigation Strategies
  - Anna van der Zwaag, Plan Preparation, Public Involvement
  - Brett Morris, LEED Green Associate, Plan Preparation, Mitigation Action Development, Hazus
  - Ruchi Agarwal, Associate Planner, Public Involvement
- Core Planning Committee Members

Introductions

- Virtual Sign-In
  - Please Sign In via SurveyMonkey: https://www.surveymonkey.com/r/PortageSignIn2
  - OR email avanderzwaag@burtonplanning.com or PCorley@portageco.com
  - OR text 614-406-7775
  - OR type your name, email, phone, title, employer into the chat
  - If attending as a group in one office, EACH person must sign in
- Questions – type into chat
- Surveys - physical copies to print, fillable PDFs, and online surveys
  - Available on the website at: http://burtonplanning.com/portage-hmp/

Introductions

- Why are we here today?
  - *Update the Portage County Multi-Jurisdictional Hazard Mitigation Plan from 2015*
  - Hazard mitigation overview
  - Progress update
  - Survey results
  - Gather stakeholder input on mitigation actions
  - Next steps

Hazard Mitigation Overview

Hazard Mitigation Overview

- What is hazard mitigation?
  - A sustained action to reduce or eliminate the long-term risk to human life and property from hazards.
- Goals:
  - Reduce potential losses in future disasters.
  - Identify natural hazards and identify actions to reduce loss.
  - Establish a process to implement these actions.

Hazard Mitigation Overview

- The disaster response cycle

(1) Mitigation	(2) Preparedness	(3) Response	(4) Recovery
• Well-before a disaster • Hazard Mitigation Plan	• When a disaster is imminent • Emergency Operations Plan	• During a disaster • Short-term emergency aid and assistance	• Post-disaster • Disaster Recovery Plan

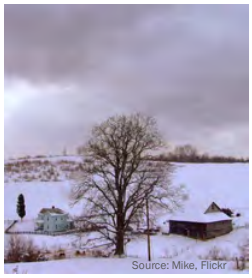
Hazard Mitigation Overview

- Potential types of hazards include:
  - Water (flooding, dam/levee failure)
  - Wind (hurricanes, tornadoes, damaging winds)
  - Summer and Winter Storms
  - Drought, Wildfires, and Extreme Heat
  - Geology (landslides, earthquakes)
  - Invasive species
  - Man-made (hazardous materials, terrorism)

Microhydropower dam, Seattle 2015

Hazard Mitigation Overview

- Robert T. Stafford Disaster Relief and Emergency Assistance Act, 1988
  - Presidential disaster declarations trigger federal assistance via FEMA.
- Disaster Mitigation Act, 2000 (DMA2K)
  - Legal basis for FEMA's state, local, and tribal mitigation planning requirements.
  - Jurisdictions must have an adopted plan to receive funds from FEMA in the event of a disaster.


Source: Mike, Flickr

Hazard Mitigation Overview

- Hazard Mitigation Plan Requirements
  - To receive FEMA funding, hazard mitigation plans must be **adopted** by local jurisdictions & **updated** every 5 years.
  - Hazard mitigation plans must include:
    - Public participation & documented update process
    - Existing conditions/demographics
    - Major disaster declarations since the previous plan
    - Risk assessments & vulnerability analyses for hazards
    - Mitigation actions & their status
    - Identified plan maintenance & updates

Hazard Mitigation Overview

- Funding Opportunities
  - Types of projects that can receive federal funding, include:
    - Property acquisition, demolition, relocation
    - Property reconstruction
    - Structure elevation, floodproofing, retrofits
    - Generators
    - Safe rooms
    - Soil stabilization
    - Etc.

Source: ODOT

Hazard Mitigation Overview

- Overall benefits of hazard mitigation planning:
  1. Minimize property damage, economic loss, injuries, and loss of human life.
  2. Enhance public awareness and education of natural and man-made hazards.
  3. Coordinate inter-jurisdictional preparedness measures, mitigation actions, and programs for efficient and effective implementation.
  4. Provide tools for decision-makers to better prepare for disasters.
  5. Achieve state and federal regulatory compliance to be eligible for funding.

Hazard Mitigation Overview

- Overall benefits of hazard mitigation planning:
  6. Municipalities: funds for related building/infrastructure needs, such as addressing issues caused by hazards or improvements to reduce future issues.
  7. Police & Fire: funds for safety-related equipment & resources.
  8. Schools: funds for school safety-related equipment/resources.
  9. Businesses: reduce/eliminate site & operational impacts.
  10. General Public: reduce/eliminate monetary & emotional costs from lost lives & homes.

Process and Schedule

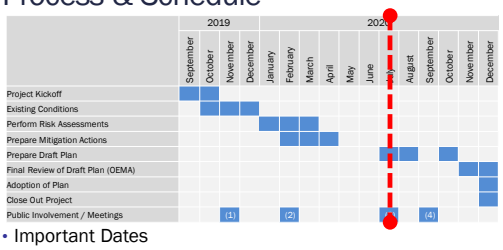
Process & Schedule

- Completed and Upcoming Tasks:
  - ✓ Gathered critical facilities information
  - ✓ Gathered repetitive loss property information
  - ✓ Summarized features and demographics of County and communities
  - ✓ Gathered historical information on previous hazard events
  - ✓ Gather GIS base mapping
  - ✓ Identified past and potential hazards to evaluate in this plan update
  - ✓ Identified mitigation actions from the previous plan that need to be updated
  - ○ Identify new mitigation actions

Process & Schedule

- Hazard Mitigation Planning Process:
  - ✓ Milestone 1: Project Kickoff Announcement; Gather Data For Existing Conditions/Demographics
  - ✓ Milestone 2: Hold Planning Meeting #1
  - ✓ Milestone 3: Perform Risk Assessments & Vulnerability Analyses; Develop Mitigation Actions
  - ✓ Milestone 4: Hold Planning Meeting #2
  - ○ Milestone 5: Prepare Draft Plan
  - ○ Milestone 6: Conduct Reviews Of Draft Plan
  - ○ Milestone 7: Adoption Of Plan
  - ○ Milestone 8: Closeout Project

Process & Schedule



- Important Dates
  - ✓ Milestone 1: Project Kickoff – November 1, 2019 (Sent by County EMA)
  - ✓ Milestone 2: Planning Meeting #1 – February 13, 2020
  - ✓ Milestone 3: Planning Meeting #2 – July 23, 2020 (Virtual)
  - ○ Milestone 6: Reviews of draft plan – September 2020
  - ○ Milestone 7: Adoption of plan – December 2020

Core Planning Committee

Core Planning Committee Role

Today:

- Updates on previous mitigation strategies (continued from previous meeting)
- Feedback on proposed mitigation strategies
- Provide local knowledge on recurring impacts from hazards

Hazard Priorities

Hazard	Priority Score	Rank
Flooding	4.167	1
Utility Failure	3.750	2
Tornadoes	3.583	3
Summer Weather	3.458	4
Active Aggressor	3.417	5
Hazardous Materials	3.417	6
Winter Weather	3.348	7
Epidemic	2.917	8
Dam Failure	2.500	9
Transportation	2.500	10
Drought & Extreme Heat	2.458	11
Invasive Species	2.000	12
Landslides	1.833	13
Earthquake	1.375	14
Wildfire	1.250	15

Mitigation Strategies

- Survey: Mitigation Action Scoring Matrix
  - Please determine whether a new mitigation action is appropriate for your jurisdiction
  - If a mitigation action is appropriate, please provide complete ratings

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Multiple Hazards								
1	Create a training room for the new National Incident Management System (NIMS) to limit confusion during disaster response	Previous							
2	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Previous							
3	Support local agency efforts to complete independent study NIMS training online.	Previous							

Next Steps

- Provide feedback on the draft version of the plan.
- Adoption of final plan by December 2020.

QUESTIONS?

PORTAGE COUNTY HAZARD MITIGATION PLAN

Planning Meeting #2 | July 23, 2020

Contact Information:

Ryan Shackelford
Director, Portage County EMA
Main: (330) 297-3607
RShackelford@portageco.com

Anna van der Zwaag
Associate Planner
Main: (614) 392-2284
avanderzwaag@burtonplanning.com

Community Stakeholders,

Thank you to everyone who attended our hazard mitigation plan meeting on July 23. We had a great turnout that sparked conversation regarding how we can prepare our communities for disasters. As such, we have updated the Mitigation Action Scoring matrix based on feedback we received. If you have not already completed this survey, please use the updated version attached and return to the Portage County EMA by August 21, 2020.

If you have already completed the version of the survey that was distributed at the meeting, please complete the Follow Up Actions Survey, and return to the Portage County EMA by August 21, 2020. Please also be sure to also submit the original survey you completed.

If you were unable to attend the meeting on July 23, please visit the project website at https://burtonplanning.com/portage-hmp/ to learn more about the project and watch a video recording of the meeting.

It is a FEMA requirement to have participation from EACH jurisdiction. If you have not already completed the surveys from both meetings, please refer to the project website to find PDF and online survey versions of each survey. In total, there are four surveys – we will need all four completed by at least one representative from each jurisdiction.

Name	Title	Employer	Email	Phone Number	Meeting Attended
Anna van der Zwaag	Associate Planner	Burton Planning Services	avanderzwaag@burtonplanning.com		Both
Brett Morris	Associate Planner	Burton Planning Services	bmorris@burtonplanning.com		Both
Ruchi Agarwal	Associate Planner	Burton Planning Services	ragarwal@burtonplanning.com		Both
Ryan Shackelford	Director	Portage County	RShackelford@portageco.com	3302973607	Both
Brett Lee	Deputy Director	Portage County EMA	blee@portageco.com	3302973607	Both
David Barnes	Chief	Aurora Fire Department	barnesd@auroraoh.com	330-995-9138	2:00 pm meeting
Lt. Rob Hagquist		Aurora Police	hagquistr@auroraoh.com	3305628181	2:00 pm meeting
Laura Bonnell	Project Manager	Chagrin River Watershed Partners	lbonnell@crwp.org	440-975-3870 ext. 1002	2:00 pm meeting
Matt Ebie	Utilities Chief Operator	City of Akron Water	mebie@akronohio.gov	330-678-0077	2:00 pm meeting
Melissa Menerey	EAP Specialist	OH-DNR Dam Safety Program	melissa.menerey@dnr.state.oh.us	614-265-6781	2:00 pm meeting
Mickey Marozzi (joined as mcollins)	Portage County Engineer	Portage County	mmarozzi@portageco.com	330-296-6411	2:00 pm meeting
Patricia Corley	Admin. EM Specialist	Portage County	PCorley@portageco.com		2:00 pm meeting
Sabrina Christian Bennett	Commissioner	Portage County	Schristianbennett@portageco.com	330-297-3605	2:00 pm meeting
Todd Peetz	Director	Portage County Regional Planning Commission	tpeetz@pcrpc.org	330 297-3615	2:00 pm meeting
Gene Roberyts	Director	Portage County Water Resources	groberts@portageco.com	3302982072	2:00 pm meeting
James Bierlair	District coordinator	Portage SWCD	Jbierlair@portageswcd.org	330-235-6807	2:00 pm meeting
Mark Kozak	Fire Chief	Ravenna Township	Mark.Kozak@ravennatownship.com	3302972192	2:00 pm meeting
Jordan Michael	Zoning Assistant	Rootstown Township	rootstownzoning@sbcglobal.net	330-325-9341	2:00 pm meeting
Kevin Grimm (left at 3:20)	Captain	Streetsboro Fire Dept / PCIMAT	kgrimm@streetsborofire.com		2:00 pm meeting
Bob Rasnick	Fire Chief	Suffield Township			2:00 pm meeting
Edward Grecol	Emergency Management	University Hospitals Portage Medical Center	edward.grecol@uhhospitals.org	330-607-6024	2:00 pm meeting
Melanie Baker	Public Service Director	City of Kent			2:00 pm meeting
Melanie Baker + Chief Tasco + Joan + 1					2:00 pm meeting
Russ Buckbee		Aurora			5:00 pm meeting
Andrew Rome	Market Manager	Haymaker Farmers' Market	haymakermarket@gmail.com	3305773355	5:00 pm meeting
Lori Babbey	Resident	Paris Township	lg904@yahoo.com	3308725322	5:00 pm meeting

County Surveys

#4

COMPLETE

Collector:	Web Link 1 (Web Link)
Started:	Thursday, July 23, 2020 8:08:44 PM
Last Modified:	Thursday, July 23, 2020 8:57:07 PM
Time Spent:	00:48:23
IP Address:	76.188.195.156

Page 1: Survey Purpose

Q1

Name and Organization

Name	**Russell Buckbee**
Organization/Agency	**PCHD**
Title/Position	**Contact tracer**
Email Address	**russbuckbee@gmail.com**

Page 2: Instructions

Q2

Multiple Hazards: Mitigation Action 1Previous Action: Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**4**

Q3

Multiple Hazards: Mitigation Action 2Previous Action: Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q4

Multiple Hazards: Mitigation Action 3Previous Action: Support local agency efforts to complete independent study NIMS training online.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q5

Multiple Hazards: Mitigation Action 4Previous Action: Create/update local emergency action plans (EAPs) as required by NIMS.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**4**

Q6

Multiple Hazards: Mitigation Action 5Previous Action: Determine a schedule by which emergency support functions should be updated.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**4**

Q7

Multiple Hazards: Mitigation Action 6Previous Action: Revisit emergency support functions update needs list and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q8

Multiple Hazards: Mitigation Action 7Previous Action: Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q9

Multiple Hazards: Mitigation Action 8Previous Action: Continue damage assessment training throughout the County and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q10

Multiple Hazards: Mitigation Action 9Previous Action: Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q11

Multiple Hazards: Mitigation Action 10Previous Action: Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q12

Multiple Hazards: Mitigation Action 11Previous Action: Continue to push information on new emergency communications onto social media.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q13

Multiple Hazards: Mitigation Action 12Previous Action: (Hiram Only) Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q14

Multiple Hazards: Mitigation Action 13Previous Action: Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q15

Multiple Hazards: Mitigation Action 14Previous Action: Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	Excellent plan

Q16

Multiple Hazards: Mitigation Action 15Previous Action: Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q17

Multiple Hazards: Mitigation Action 16New Action: Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q18

Multiple Hazards: Mitigation Action 17New Action: Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	also need to cost the removal of trees to reduce removals

Q19

Multiple Hazards: Mitigation Action 18New Action: Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q20

Multiple Hazards: Mitigation Action 19New Action: Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q21

Multiple Hazards: Mitigation Action 20New Action: Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q22

Multiple Hazards: Mitigation Action 21New Action: Perform a countywide sustainability study to draft long-term goals and document strategies related to combating climate change in the County to reduce greenhouse gas (GHG) emissions. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q23

Multiple Hazards: Mitigation Action 23New Action: Consider including green design standards in building codes.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q24

Multiple Hazards: Mitigation Action 24New Action: Identify areas in permitting processes that can be sped up for projects that meet certain environmental standards (green tape).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q25

Multiple Hazards: Mitigation Action 25New Action: Perform a countywide food system security study and draft a plan to improve local food access during hazard events.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q26

Multiple Hazards: Mitigation Action 26New Action: Work with the Ohio EPA and to identify GHG emissions at the County level. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 3: Dam Failure

Q27

Dam Failure: Mitigation Action 1Previous Action: For any identified, non-listed impoundments, determine the downstream risk should the facility fail.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q28

Dam Failure: Mitigation Action 2Previous Action: (Aurora Only) Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Page 4: Drought & Extreme Heat

Q29

Drought & Extreme Heat: Mitigation Action 1New Action: Encourage or mandate the use of local plants on public property (xeriscaping).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	Given climate shift we may need to use more southern plants

Q30

Drought & Extreme Heat: Mitigation Action 2New Action: Develop of list of criteria that triggers drought-related activities when met.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**3**

Q31

Drought & Extreme Heat: Mitigation Action 3New Action: Gather and analyze water and climate data to gain a better understanding of local climate and drought history.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q32

Drought & Extreme Heat: Mitigation Action 4New Action: Install low-flow water saving faucets, toilets, and showers in public properties where possible.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**4**

Page 5: Earthquakes

Q33

Earthquakes: Mitigation Action 1New Action: Maintain a database to track community vulnerability to earthquake risk and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Page 6: Epidemic

Q34

Epidemic: Mitigation Action 1New Action: Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	We need action from a plan yesterday.

Page 7: Flooding

Q35

Flooding: Mitigation Action 1Previous Action: Enhance wetland buffer requirements to help protect water quality.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	Hawthorn in Aurora demonstrated the problems of fail, to do this effecting Aurora Lake.

Q36

Flooding: Mitigation Action 2Previous Action: Identify all repetitive loss/potential repetitive loss structures within Portage County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**4**
Comments:	We need to not just identify but act regarding receptive loss structures, action 4

Q37

Flooding: Mitigation Action 3Previous Action: Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q38

Flooding: Mitigation Action 4Previous Action: Determine most appropriate, non-invasive corrective action for each repetitive loss structure.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q39

Flooding: Mitigation Action 5Previous Action: Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q40

Flooding: Mitigation Action 6Previous Action: Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q41

Flooding: Mitigation Action 7Previous Action: Implement corrective measures identified in the above actions.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q42

Flooding: Mitigation Action 8Previous Action: Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q43

Flooding: Mitigation Action 9Previous Action: Identify funding for cleaning and maintaining ditches and storm waterways.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q44

Flooding: Mitigation Action 10Previous Action: Clean and maintain ditches according to the determined cause.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q45

Flooding: Mitigation Action 11Previous Action: Fix storm pipes to improve stormwater management.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q46

Flooding: Mitigation Action 12Previous Action: Raise roadway profiles above flood elevation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**3**
Immediate Need	**3**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q47

Flooding: Mitigation Action 13Previous Action: Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q48

Flooding: Mitigation Action 14New Action: Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q49

Flooding: Mitigation Action 15New Action: Require that floodplains be kept as open space.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q50

Flooding: Mitigation Action 16New Action: Complete a stormwater drainage study for known problem areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**

Q51

Flooding: Mitigation Action 17New Action: Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	Yes greatly needed

Q52

Flooding: Mitigation Action 18New Action: Retrofit properties that suffer from frequent flash flooding utilizing available stormwater management techniques.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q53

Flooding: Mitigation Action 18New Action: Identify ditches that can be dredged or treated with netting and other filtration systems to limit dirt flow, debris blockage and flooding.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 8: Hazardous Materials

Q54

Hazardous Materials: Mitigation Action 1Previous Action: Continue to review Tier II hazard materials reports as they are submitted.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q55

Hazardous Materials: Mitigation Action 2Previous Action: Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q56

Hazardous Materials: Mitigation Action 3New Action: Review and update County Commodity Flow Study.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**3**
Immediate Need	**3**
Risk Reduction	**3**
Comments:	Unclear what a flow study is

Q57

Hazardous Materials: Mitigation Action 4New Action: Create a radiological emergency plan for areas within a 50-mile radius of a nuclear powerplant. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 9: Infrastructure & Utility Failure

Q58

Infrastructure & Utility Failure: Mitigation Action 1New Action: Purchase and install backup generators in public buildings and critical facilities.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**4**
Comments:	Critical facilities yes all public buildings no. I rated as combined.

Page 10: Invasive Species

Q59

Invasive Species: Mitigation Action 1New Action: Complete an ecological and economic impact study for local and nearby invasive species.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Page 11: Landslides, Erosion & Land Subsidence

Q60

Landslides: Mitigation Action 1New Action: Use GIS to identify and map landslide risk areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**3**

Q61

Landslides: Mitigation Action 2New Action: Compile a complete list of any underground mines in the County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q62

Landslides: Mitigation Action 3New Action: Limit or prevent development in identified risk areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q63

Landslides: Mitigation Action 4New Action: Acquire and demolish or relocate at-risk properties and infrastructure.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**3**

Q64

Landslides: Mitigation Action 5New Action: Work with local representatives to map the locations of abandoned mines. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q65

Landslides: Mitigation Action 6New Action: Digitize old mine maps. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q66

Landslides: Mitigation Action 7New Action: Consider buying out, demolishing, and relocating properties built on top of abandoned mines.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q67

Landslides: Mitigation Action 8New Action: Provide ODNR with updated abandoned mine locations.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 12: Severe Summer Storms

Q68

Severe Summer Storms: Mitigation Action 1New Action: Post warning signs at local parks, county fairs, and other outdoor areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q69

Severe Summer Storms: Mitigation Action 2New Action: Install and maintain surge protection on critical electronic equipment.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q70

Severe Summer Storms: Mitigation Action 3New Action: Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q71

Severe Summer Storms: Mitigation Action 4New Action: Convert traffic lights to mast arms.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**2**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**4**

Q72

Respondent skipped this question

Severe Summer Storms: Mitigation Action 5New Action: Provide informational packets (paper or digital) on micro and macro bursts to the public.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 13: Severe Winter Weather

Q73

Severe Winter Weather: Mitigation Action 1Previous Action: Assess trees for their potential to injure people or damage property in public places.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**2**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**2**
Risk Reduction	**2**

Q74

Severe Winter Weather: Mitigation Action 2New Action: Ensure the development and enforcement of building codes for roof snow loads.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q75

Severe Winter Weather: Mitigation Action 3New Action: Use snow fences or “living snow fences” (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	Living snow fences are a better option and I rated based on that.Rating drop for manmade fences.

Q76

Severe Winter Weather: Mitigation Action 4New Action: Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q77

Severe Winter Weather: Mitigation Action 5New Action: Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**3**

Q78

Severe Winter Weather: Mitigation Action 6New Action: Plan for and maintain adequate road and debris clearing capabilities.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Page 14: Terrorism

Q79

Terrorism/Active Aggressor: Mitigation Action 1New Action: Work with local and State law enforcement officials to identify at risk areas in the County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**3**

Q80

Terrorism/Active Aggressor: Mitigation Action 2New Action: Work with local and State law enforcement officials to identify best practices to mitigate identified risks.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**

Q81

Terrorism/Active Aggressor: Mitigation Action 3New Action: Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	A critical minimally addressed area, glad it is in here.

Q82

Terrorism/Active Aggressor: Mitigation Action 4New Action: Cybersecurity - Install server redundancies for public IT infrastructure. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 15: Tornadoes

Q83

Tornadoes: Mitigation Action 1New Action: Require construction of safe rooms in new schools, daycares, and nursing homes.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q84

Tornadoes: Mitigation Action 2New Action: Conduct tornado drills in public buildings.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**4**

Q85

Tornadoes: Mitigation Action 3New Action: Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**3**
Immediate Need	**3**
Risk Reduction	**3**
Comments:	There are too many vulnerable locations.

Q86

Tornadoes: Mitigation Action 4New Action: Distribute tornado shelter location information.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**3**

Page 16: Transportation

Q87

Transportation: Mitigation Action 1New Action: Complete a full transportation study to identify risk areas and transportation behaviors.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**5 (highest possible score, most cost effective)**

Q88

Transportation: Mitigation Action 2New Action: Improve public transportation and overall transportation access.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 17: Wildfire

Q89

Wildfire: Mitigation Action 1New Action: Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**3**

Q90

Wildfire: Mitigation Action 2New Action: Routinely inspect the functionality of fire hydrants and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**3**

Q91

Wildfire: Mitigation Action 3New Action: Develop a vegetation management plan to reduce wildfire risk.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**3**

Q92

Wildfire: Mitigation Action 4New Action: Ensure that buildings have fire extinguishers and fire detectors installed.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**

Page 18: Additional Mitigation Actions (Suggest Your Own)

Q93

Rate and describe any additional mitigation actions you would like to see in your community below.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**4**
Describe your mitigation action.:	Ensure key individuals are aware of the radiation capability of local safety forces.

Q94

Rate and describe any additional mitigation actions you would like to see in your community below.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**5 (highest possible score, most cost effective)**
Describe your mitigation action.:	Ensure that KI access from the state can be done thru a clear process for distribution to the general population.

Q95

Rate and describe any additional mitigation actions you would like to see in your community below.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**5 (highest possible score, most cost effective)**
Risk Reduction	**5 (highest possible score, most cost effective)**
Describe your mitigation action.:	Mitigate eutrophication of lakes and streams thru restrictions of fertilization of lands per Oh Dept of Agriculture standards with focus on golf courses and residential lawn service companies.

Name & Organization: Joe Reichin OIS Auditor

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☑ More effort in the CyberAttack planning and communication

☑ More Climate Change Research Related

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Joe Berdlin GIS Auditor

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	2
2. Flooding	3
3. Drought and Extreme Heat	3
4. Earthquakes	2
5. Tornadoes	5
6. Active Aggressor	4
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	3
9. Severe Summer Weather	5
10. Hazardous Materials	3
11. Invasive Species	2
12. Transportation	3
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	2
15. Wildfire	2

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

PORTAGE COUNTY

NAME: Joe Rexchin POSITION: GIS Andetor

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

Name & Organization: Mickey Marozzi, Portage County Engineer

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Mickey Marozzi, PCE

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	2
2. Flooding	4
3. Drought and Extreme Heat	1
4. Earthquakes	0
5. Tornadoes	3
6. Active Aggressor	2
7. Severe Winter Weather	2
8. Infrastructure / Utility Failure	2
9. Severe Summer Weather	2
10. Hazardous Materials	1
11. Invasive Species	1
12. Transportation	1
13. Epidemic	1
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	0
15. Wildfire	0

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

PORTAGE COUNTY

NAME: Mickey Marozzi POSITION: PCE

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

Name & Organization: Bob Walker - PCHD

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	1
2. Flooding	5
3. Drought and Extreme Heat	3
4. Earthquakes	2
5. Tornadoes	5
6. Active Aggressor	5
7. Severe Winter Weather	5
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	5
10. Hazardous Materials	4
11. Invasive Species	2
12. Transportation	4
13. Epidemic	4
Possible Additional Hazards	**Priority Ratings (0-5)**
14. ~~Landslides, Erosion,~~ and Mine Subsidence	1
15. Wildfire	1

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: _____

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

constant turnover of staff/political positions

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

With turnover of political positions, need still present

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

☑ Goal 4: Ensure good disaster communications.

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☑ Current Trends: Mass shooting

☐ epidemic - COVID-19

☐

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

PORTAGE COUNTY

NAME: Bob Walker POSITION: PHEP Coordinator

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: Jan, 2020 Why: Why: Why: % Complete: 30%	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: Why: Why: Why: % Complete:	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: Why: Why: Why: % Complete: 5%	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: Why: Why: Why: % Complete:	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: Why: Why: Why: % Complete: 80%	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: 2017 Why: ____ Why: ____ Why: ____ % Complete: ____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: ____ Why: ____ Why: ____ Why: ____ % Complete: ____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: ____ Why: ____ Why: ____ Why: ____ % Complete: ____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: ____ Why: ____ Why: ____ Why: ____ % Complete: ____	
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15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
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29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

Name & Organization: Lloyd Alger Portage County

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☒ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☒ IDENTIFY/TRAIN IN OFFLINE COMMUNICATIONS

☒ IDENTIFY MITIGATION ACTIONS THAT COULD BE COMPROMISED BY CYBER TERRORISM

☒ COST/BENEFIT ANALYSIS OF RELOCATION VS. MITIGATION RESULTING FROM CLIMATE CHANGE DISASTERS.

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Lloyd Alger

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	1
2. Flooding	4
3. Drought and Extreme Heat	1
4. Earthquakes	1
5. Tornadoes	4
6. Active Aggressor	3
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	2
10. Hazardous Materials	2
11. Invasive Species	0
12. Transportation	3
13. Epidemic	3

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	2
15. Wildfire	2
16. Cyber Terrorism/Incident	4
17.	

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: James A. Blair Portage SWCD

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: James A. Bierlair Portage SWCD

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	4
2. Flooding	5
3. Drought and Extreme Heat	3
4. Earthquakes	2
5. Tornadoes	4
6. Active Aggressor	4
7. Severe Winter Weather	5
8. Infrastructure / Utility Failure	5
9. Severe Summer Weather	5
10. Hazardous Materials	3
11. Invasive Species	4
12. Transportation	3
13. Epidemic	5
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	5
15. Wildfire	
mine subsidence	3

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: Christine Graycroft Portage Park District

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

☑ Goal 3: Coordinate local mitigation efforts in Portage County. – Needs detail what efforts are ongoing how are they coordinated?

☑ Goal 4: Ensure good disaster communications.

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ Inventory accessible to all mapped hazards

☐ Inventory of personnel & equipment form ponds/dams

☐ develop alt. energy options wetlands associated with floodplains

Need more oversight & security — oil & gas infrastructure

oil & gas infrastructure is susceptible to vandalism/accidents

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Consider effects of woody debris hazards in rivers as flood magnifiers & also hazards for recreational users.

Hazardous Materials: Pc. has hundreds of oil & gas wells, storage tanks, gas pipes & valves etc that are not secured. Need to ensure proper inspection and enforce securing facilities from vandalism & accidental leaks. Many leak already.

Need a comprehensive wetlands protection program to prevent flooding

acquired floodplain properties and wetlands protection properties could be turned into parks.

Early detection & reporting system for invasive spp.

Name & Organization: Joseph L. Bodnar
Deputy Director, Portage County Building Dept.

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan) I was not involved with the County for the 2015 plan, therefor cannot comment

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: JOSEPH L. BOEHNER
Deputy Director, Portage County Building Department

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	1
2. Flooding	3
3. Drought and Extreme Heat	0
4. Earthquakes	0
5. Tornadoes	5
6. Active Aggressor	0
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	0
10. Hazardous Materials	3
11. Invasive Species	1
12. Transportation	1
13. Epidemic	1
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	N/A 0
15. Wildfire	N/A 0

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

& inter-connectivity of Agencies after a hazard

& relocation of Agencies when a hazard actually destroys an Agencys offices?

A 'GROUP' perhaps?

Flooding
- flash
- river/streams

Add Erosion to the group, due to

Name & Organization: LARRY JENKINS PORTAGE COUNTY ENGINEER

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

UNKNOWN - SAW SOME INFORMATION ABOUT WENS

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

☑ Goal 4: Ensure good disaster communications.

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: LARRY JENKINS – PORTAGE COUNTY ENGINEERS OFFICE

HAZARD PRIORITIES

Instructions:
1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:
0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards		Priority Ratings (0-5)
1. Dam/Levee Failure	– FEDERAL AGENCY	3
2. Flooding	–	5
3. Drought and Extreme Heat	LOW	2
4. Earthquakes	LOW	2
5. Tornadoes		2
6. Active Aggressor		1
7. Severe Winter Weather		4
8. Infrastructure / Utility Failure		3 – SAME?
9. Severe Summer Weather		4
10. Hazardous Materials		2
11. Invasive Species		1
12. Transportation		4
13. Epidemic		0
Possible Additional Hazards		**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence		3
15. Wildfire		0

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

SEVERE STORMS NEED TO BE GROUPED

Name & Organization: Christine Graycroft Portage Park District

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	5
2. Flooding	5
3. Drought and Extreme Heat	3
4. Earthquakes	2
5. Tornadoes	3
6. Active Aggressor	1
7. Severe Winter Weather	4
8. Infrastructure / Utility Failure	5
9. Severe Summer Weather	2
10. Hazardous Materials	5
11. Invasive Species	3
12. Transportation	2
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	2
15. Wildfire	

domestic terrorist activity – cyber war
dis information campaigns – need reliable source of info
drinking water (groundwater / surface water) pollution
failing sewers septic that pollute water ways
increase potential for disease

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

mapping of critical infrastructure — gas lines utility lines that are not already listed with OUPS

Name & Organization: PORTAGE COUNTY WATER RESOURCES

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

Need New Employee Training

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

☑ Goal 4: Ensure good disaster communications.

Need County-Wide Common Communication System All Agencies
Or Inner Operability Between All Systems

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☑ Table Top Exercises For Water Resources Crossing

☒ Multi Hazard : Rain, Wind, Power

☒ Over Extend Time Period

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: WATER RESOURCES

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	4
2. Flooding	5
3. Drought and Extreme Heat	4
4. Earthquakes	4
5. Tornadoes	5
6. Active Aggressor	4
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	5
9. Severe Summer Weather	4
10. Hazardous Materials	3
11. Invasive Species	2
12. Transportation	3
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	3
15. Wildfire	3

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

NOTE: ACTIVE AGGRESSOR IS NOW PART OF TERRORISM CONSIDER STANDALONE

CYBER TERRORISM MAY BE BETTER SERVED AS STANDALONE

Name & Organization: Ed Greco UH Portage

HAZARD PRIORITIES

Instructions:
1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:
0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	3
2. Flooding	3
3. Drought and Extreme Heat	4
4. Earthquakes	2
5. Tornadoes	5
6. Active Aggressor	4
7. Severe Winter Weather	5
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	4
10. Hazardous Materials	3
11. Invasive Species	1
12. Transportation	2
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	1
15. Wildfire	3

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: Ed Grecol UH Portage

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

Training of NIMS System is very important + Relevant

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

☑ Goal 4: Ensure good disaster communications.

Comms is always an issue and is one of the most important Aspects of Incident Management

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Matt Mohler, Facilities Director at Delta Systems

MITIGATION ACTIONS SCORING MATRIX

Purpose

As part of the hazard mitigation planning process, communities are asked to identify specific projects and activities (mitigation actions) that will help their communities achieve the long-term outcomes related to specific hazards. The status of each previously identified mitigation action is reviewed during the Hazard Mitigation Planning Process to determine the progress being made towards the County's hazard-specific goals. New mitigation projects and actions are also identified in this process.

The purpose of the Mitigation Actions Scoring Matrix is to determine which mitigation actions are relevant to each of the communities within Portage County and to develop a corresponding action plan that describes how the mitigation actions will be implemented. Scores collected from this Mitigation Actions Scoring Matrix will be used to decide how the mitigation actions will be prioritized, administered, and incorporated into Portage County's existing planning mechanisms.

Instructions

To complete this matrix, please review each proposed mitigation action and indicate if it is applicable to your jurisdiction. If it is applicable, score it from 1-5 for each category described below. For each category, a rating of 1 is the lowest score, a rating of 3 is neutral/unsure, and a rating of 5 is the highest score.

1. **Applicable to your jurisdiction? - Write Yes or No** - to indicate if you think this mitigation action is applicable to your community or jurisdiction. If Yes, fill out the remaining columns; if No, do not fill out the remaining columns.
2. **Cost Effective - Rank 1 - 5** - the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.
3. **Technically Feasible - Rank 1 - 5** - the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
4. **Environmentally Sound - Rank 1 - 5** - the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.
5. **Immediate Need - Rank 1 - 5** - whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.
6. **Risk Reduction - Rank 1 - 5** - the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

In addition, if there are any mitigation actions that are not listed that should be included, please add them, and score them on the last page. We encourage you to consider regularly occurring problems for each hazard listed below and suggest mitigation actions for these problems. You may also list regularly occurring problems within your community without suggesting a mitigation action.

Each action is associated with a goal of the hazard mitigation plan. These goals are located on the back of this page for your reference as you complete this survey.

NAME:	JURISDICTION:

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Multiple Hazards								
1	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Previous	Yes	5	5	3	5	4	
2	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Previous	Yes	5	5	3	3	3	
3	Support local agency efforts to complete independent study NIMS training online.	Previous	Yes	5	5	3	4	3	
4	Create/update local emergency action plans (EAPs) as required by NIMS.	Previous	Yes	5	5	3	4	3	
5	Determine a schedule by which emergency support functions should be updated.	Previous	Yes	3	5	3	3	2	
6	Revisit emergency support functions update needs list and provide documentation.	Previous	Yes	3	5	3	3	4	
7	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Previous	Yes	3	5	3	3	3	
8	Continue damage assessment training throughout the County and provide documentation.	Previous	Yes	5	5	4	3	3	
9	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Previous	Yes	3	3	1	2	3	
10	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Previous	Yes	3	3	1	1	2	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
11	Continue to push information on new emergency communications onto social media.	Previous	Yes	3	5	1	1	1	
12	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	Previous	Hiram Only	3	5	3	1	1	
13	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.	Previous	Yes	3	5	3	1	1	
14	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Previous	Yes	2	5	4	1	3	
15	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Previous	Yes	3	5	1	1	3	
16	Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)	New	Yes	3	3	1	1	2	
17	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	New	Yes	1	5	5	1	1	
18	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New	Yes	1	5	3	1	1	
19	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New	Yes	1	5	3	1	1	
20	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	New	Yes	1	5	1	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
			Dam Failure						
21	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Previous	Yes	3	3	4	2	4	
22	Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).	Previous	Aurora Only	3	5	3	1	1	
			Drought & Extreme Heat						
23	Encourage or mandate the use of local plants on public property (xeriscaping).	New	Yes	1	5	1	1	1	
24	Develop of list of criteria that triggers drought-related activities when met.	New	Yes	3	3	3	1	1	
25	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	New	Yes	1	3	1	1	1	
26	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	New	Yes	5	5	5	3	1	
			Earthquakes						
27	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	New	No						
			Epidemic						
28	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	New	Yes	5	5	3	5	3	
			Flooding						
29	Enhance wetland buffer requirements to help protect water quality.	Previous	Yes	3	5	4	3	3	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
30	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Previous	Yes	3	5	3	2	2	
31	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Previous	Yes	3	5	3	2	2	
32	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Previous	Yes	3	3	3	2	2	
33	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	Previous	Yes	1	3	2	1	1	
34	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Previous	Yes	3	5	1	1	1	
35	Implement corrective measures identified in the above actions.	Previous	Yes	3	3	2	1	1	
36	Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.	Previous	Yes	3	2	1	1	1	
37	Identify funding for cleaning and maintaining ditches and storm waterways.	Previous	Yes	3	3	3	3	3	
38	Clean and maintain ditches according to the determined cause.	Previous	Yes	3	3	3	3	3	
39	Fix storm pipes to improve stormwater management.	Previous	Yes	5	5	5	5	5	
40	Raise roadway profiles above flood elevation.	Previous	Yes	3	5	1	2	1	
41	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Previous	Yes	3	5	1	3	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
42	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	New	Yes	3	3	3	1	1	
43	Require that floodplains be kept as open space.	New	Yes	3	3	3	1	1	
44	Complete a stormwater drainage study for known problem areas.	New	Yes	3	5	3	1	1	
45	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	New	Yes	3	5	3	1	1	
	Hazardous Materials								
46	Continue to review Tier II hazard materials reports as they are submitted.	Previous	Yes	5	5	3	5	4	
47	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Previous	Yes	3	5	3	5	5	
48	Review and update County Commodity Flow Study.	New	Yes	3	5	3	4	3	
	Infrastructure & Utility Failure								
49	Purchase and install backup generators for public buildings and critical facilities.	New	Yes	3	5	1	3	1	
	Invasive Species								
50	Complete an ecological and economic impact study for local and nearby invasive species.	New	Yes	1	5	2	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Landslides, Erosion, and Mine Subsidence								
51	Use GIS to identify and map landslide risk areas.	New	Yes	3	3	1	1	3	
52	Compile a complete list of any underground mines in the County.	New	Yes	3	5	1	3	1	
53	Limit or prevent development in identified risk areas.	New	Yes	3	3	3	3	3	
54	Acquire and demolish or relocate at-risk properties and infrastructure.	New	Yes	1	5	1	1	1	
	Severe Summer Weather								
55	Post warning signs at local parks, county fairs, and other outdoor areas.	New	Yes	2	5	1	1	3	
56	Install and maintain surge protection on critical electronic equipment.	New	Yes	5	5	1	5	5	
57	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	New	No						
58	Convert traffic lights to mast arms.	New	Yes	1	5	1	1	1	
	Severe Winter Weather								
59	Assess trees for their potential to injure people or damage property in public places.	Previous	Yes	3	5	1	3	3	
60	Ensure the development and enforcement of building codes for roof snow loads.	New	Yes	3	5	1	2	3	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
61	Use snow fences or "living snow fences" (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	New	Yes	3	5	3	2	2	
62	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	New	Yes	2	5	1	2	3	
63	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	New	Yes	1	5	1	1	1	
64	Plan for and maintain adequate road and debris clearing capabilities.	New	Yes	3	5	1	2	4	
	Terrorism								
65	Work with local and State law enforcement officials to identify risk areas in the County.	New	Yes	3	5	1	3	3	
66	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	New	Yes	3	5	1	1	1	
67	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	New	Yes	3	3	1	1	1	
	Tornadoes								
68	Require construction of safe rooms in new schools, daycares, and nursing homes.	New	Yes	3	5	1	2	2	
69	Conduct tornado drills in public buildings.	New	Yes	5	5	1	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
70	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	New	Yes	3	5	1	1	2	
71	Distribute tornado shelter location information.	New	Yes	1	5	1	1	1	
	Transportation								
72	Complete a full transportation study to identify risk areas and transportation behaviors.	New	Yes	2	5	1	2	2	
	Wildfire								
73	Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.	New	No						
74	Routinely inspect the functionality of fire hydrants and provide documentation.	New	Yes	3	5	3	3	3	
75	Develop a vegetation management plan to reduce wildfire risk.	New	No						
76	Ensure that buildings have fire extinguishers and fire detectors installed.	New	Yes	3	5	1	2	2	

City of Aurora Surveys

meeting with Aurora

Ryan Shackelford <RShackelford@portageco.com>

Wed 9/30/2020 7:29 AM

To: Brett Morris <bmorris@burtonplanning.com>; Anna Van Der Zwaag <avanderzwaag@burtonplanning.com>

We met with the City of Aurora on Tuesday, August 25th at 1300 to discuss the BRIC grant. This in-turn, turned into a healthy conversa. on regarding the miĀga. on plan update. You'll noĀce my correspondence is different to Aurora due to previous conversa. ons and mee. ngs. Since, Aurora has submiĀed a project to be noted in the next plan rendiĀon. Thank you.

Ryan T. Shackelford
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Office: 330-297-3607
FAX # 330-297-4569

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YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

Name & Organization: David Barnes Aurora F.D.

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.
Fire is very good, other disciplines may need training

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster
Unknown

☑ Goal 3: Coordinate local mitigation efforts in Portage County.
EMA does well gathering damage assessments

☑ Goal 4: Ensure good disaster communications.
Getting better as more agencies use MARCS

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

Name & Organization: Daniel Barnes Aurora F.D.

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	2
2. Flooding	5
3. Drought and Extreme Heat	3
4. Earthquakes	1
5. Tornadoes	4
6. Active Aggressor	5
7. Severe Winter Weather	4
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	4
10. Hazardous Materials	3
11. Invasive Species	2
12. Transportation	3
13. Epidemic	2

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	1
15. Wildfire	0

PORTAGE COUNTY

NAME: David Byrnes POSITION: Aurora FD

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

City of Kent Surveys

MITIGATION ACTIONS SCORING MATRIX

Purpose

As part of the hazard mitigation planning process, communities are asked to identify specific projects and activities (mitigation actions) that will help their communities achieve the long-term outcomes related to specific hazards. The status of each previously identified mitigation action is reviewed during the Hazard Mitigation Planning Process to determine the progress being made towards the County's hazard-specific goals. New mitigation projects and actions are also identified in this process.

The purpose of the Mitigation Actions Scoring Matrix is to determine which mitigation actions are relevant to each of the communities within Portage County and to develop a corresponding action plan that describes how the mitigation actions will be implemented. Scores collected from this Mitigation Actions Scoring Matrix will be used to decide how the mitigation actions will be prioritized, administered, and incorporated into Portage County's existing planning mechanisms.

Instructions

To complete this matrix, please review each proposed mitigation action and indicate if it is applicable to your jurisdiction. If it is applicable, score it from 1-5 for each category described below. For each category, a rating of 1 is the lowest score, a rating of 3 is neutral/unsure, and a rating of 5 is the highest score.

1. **Applicable to your jurisdiction?** – **Write Yes or No** – to indicate if you think this mitigation action is applicable to your community or jurisdiction. If Yes, fill out the remaining columns; if No, do not fill out the remaining columns.
2. **Cost Effective** – **Rank 1 – 5** – the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.
3. **Technically Feasible – Rank 1 – 5 –** the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
4. **Environmentally Sound – Rank 1 – 5 –** the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.
5. **Immediate Need – Rank 1 – 5 –** whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.
6. **Risk Reduction – Rank 1 – 5 –** the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

In addition, if there are any mitigation actions that are not listed that should be included, please add them, and score them on the last page. We encourage you to consider regularly occurring problems for each hazard listed below and suggest mitigation actions for these problems. You may also list regularly occurring problems within your community without suggesting a mitigation action.

Each action is associated with a goal of the hazard mitigation plan. These goals are located on the back of this page for your reference as you complete this survey.

NAME: Melanie Baker, Chief Tosko, Chief Shearer, Joan Seidel **JURISDICTION:** City of Kent

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Multiple Hazards								
1	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Previous	Yes	5	5	5	4	5	The more training the bettter the understanding in an emergency.
2	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Previous	Yes	5	5	5	4	4	Easy to coordinate throught PCEMA or via social media
3	Support local agency efforts to complete independent study NIMS training online.	Previous	Yes	5	5	5	4	4	
4	Create/update local emergency action plans (EAPs) as required by NIMS.	Previous	Yes	4	4	5	4	4	Cost could be an issue
5	Determine a schedule by which emergency support functions should be updated.	Previous	Yes	4	4	4	4	4	Should do this helps keep mutual aid and other thiings fress
6	Revisit emergency support functions update needs list and provide documentation.	Previous	Yes	4	4	4	4	4	
7	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Previous	Yes	4	4	4	3	4	Should have a list of members with full contact info updated, meet 1/4ly or so
8	Continue damage assessment training throughout the County and provide documentation.	Previous	Yes	3	4	4	3	3	Maybe cover in meetings mentioned above
9	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Previous	Yes	4	4	4	4	4	Yes should have this list and mutual aid met to discuss as per #7
10	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Previous	Yes	3	4	3	4	5	Will reach a greater number of people.

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
11	Continue to push information on new emergency communications onto social media.	Previous	Yes	5	5	5	4	4	Yes reach greater number of people
12	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	Previous	Hiram Only						
13	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.	Previous	Yes	4	4	4	4	4	
14	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Previous	Yes	4	4	5	4	4	Currently do with NPDES permit
15	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Previous	Yes	3	4	4	5	5	Could do, may be costly but could yield good results
16	Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)	New	Yes	4	4	4	4	4	Agreed that we should all be using the same codes
17	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	New	Yes	4	4	4	4	4	Currently do as per ordinances
18	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New	Yes	2	3	3	1	2	Not sure of true impact
19	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New	Yes	1	3	3	2	2	Not sure of true impact
20	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	New	Yes	3	3	4	2	2	Currently do this through sub regs and ordinances

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
			Dam Failure						
21	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Previous	Yes	3	3	4	3	4	Lake Rockwell need to work with Akron WAter
22	Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).	Previous	Aurora Only						
			Drought & Extreme Heat						
23	Encourage or mandate the use of local plants on public property (xeriscaping).	New	Yes	4	4	5	3	3	Currently do on City property
24	Develop of list of criteria that triggers drought-related activities when met.	New	Yes	2	3	3	2	2	Work with the County and the state to establish
25	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	New	Yes	2	3	3	2	2	Work with the County / State to establish do at water plants now.
26	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	New	Yes	3	4	4	2	2	
			Earthquakes						
27	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	New	Yes	3	3	3	3	2	Work with County State Federal
			Epidemic						
28	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	New	Yes	5	5	4	5	4	Currently doing should debrief
			Flooding						
29	Enhance wetland buffer requirements to help protect water quality.	Previous	Yes	3	3	4	4	3	Currently doing as per ordinances

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
30	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Previous	Yes	4	5	4	3	3	
31	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Previous	Yes	3	3	3	2	2	Have storm / flooding areas listed monitor annually
32	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Previous	Yes	3	3	3	2	2	Done in house
33	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	Previous	Yes	2	3	3	2	3	We do projects in house and hire out work with eng. and CM staff
34	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Previous	Yes	3	3	3	2	3	Expensive CAP projects
35	Implement corrective measures identified in the above actions.	Previous	Yes	2	3	3	2	3	Can be expensive
36	Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.	Previous	Yes	3	3	3	2	2	
37	Identify funding for cleaning and maintaining ditches and storm waterways.	Previous	Yes	3	3	3	3	3	
38	Clean and maintain ditches according to the determined cause.	Previous	Yes	2	2	2	2	2	
39	Fix storm pipes to improve stormwater management.	Previous	Yes	2	2	2	2	2	If downstream can handle the flow
40	Raise roadway profiles above flood elevation.	Previous	Yes	2	3	3	2	2	
41	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Previous	Yes	1	1	1	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
42	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	New	Yes	2	2	2	1	2	
43	Require that floodplains be kept as open space.	New	Yes	3	3	3	2	2	
44	Complete a stormwater drainage study for known problem areas.	New	Yes	4	4	4	3	4	currrently doing and studiing
45	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	New	Yes	1	2	2	2	2	Maintenance once in is always a problem
				Hazardous Materials					
46	Continue to review Tier II hazard materials reports as they are submitted.	Previous	Yes	4	5	5	4	5	Important program
47	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Previous	Yes	4	4	4	3	4	
48	Review and update County Commodity Flow Study.	New	Yes	3	3	3	3	3	Need more information
				Infrastructure & Utility Failure					
49	Purchase and install backup generators for public buildings and critical facilities.	New	Yes	4	4	3	4	4	Main buildings and shelters that meet needs of community
				Invasive Species					
50	Complete an ecological and economic impact study for local and nearby invasive species.	New	Yes	2	3	2	2	2	Can work with ODNR

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
			Landslides, Erosion, and Mine Subsidence						
51	Use GIS to identify and map landslide risk areas.	New	Yes	2	3	3	2	2	
52	Compile a complete list of any underground mines in the County.	New	Yes	3	4	4	3	3	All mines, wells oil, gas water etc.
53	Limit or prevent development in identified risk areas.	New	Yes	3	4	4	3	4	
54	Acquire and demolish or relocate at-risk properties and infrastructure.	New	No						Expensive, insurance, grants needed
			Severe Summer Weather						
55	Post warning signs at local parks, county fairs, and other outdoor areas.	New	Yes	2	3	3	2	2	bar codes or signs to tune into ema etc.
56	Install and maintain surge protection on critical electronic equipment.	New	Yes	4	4	4	4	4	
57	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	New	Yes	4	4	4	4	4	
58	Convert traffic lights to mast arms.	New	Yes	3	4	4	3	3	Currently doing
			Severe Winter Weather						
59	Assess trees for their potential to injure people or damage property in public places.	Previous	Yes	4	4	4	4	4	Do this year round
60	Ensure the development and enforcement of building codes for roof snow loads.	New	Yes	3	3	3	3	3	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
61	Use snow fences or "living snow fences" (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	New	Yes	3	3	3	2	2	
62	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	New	Yes	4	4	4	4	4	List should be made and kept current
63	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	New	Yes	4	4	3	3	2	Beginning to enhance website with this info may use social media too
64	Plan for and maintain adequate road and debris clearing capabilities.	New	Yes	3	4	3	4	3	Do this year round
	Terrorism								
65	Work with local and State law enforcement officials to identify risk areas in the County.	New	Yes	3	3	2	3	3	
66	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	New	Yes	3	3	2	3	3	
67	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	New	Yes	3	3	2	3	3	
	Tornadoes								
68	Require construction of safe rooms in new schools, daycares, and nursing homes.	New	No	1	1	1	1	1	costly and room is issue
69	Conduct tornado drills in public buildings.	New	Yes	2	2	2	2	2	School and public offices

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
70	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	New	Yes	1	1	1	1	1	Not feasible, not sure of value and time to get to one.
71	Distribute tornado shelter location information.	New	Yes	3	3	3	3	3	Can use website, social media, reader boards
				Transportation					
72	Complete a full transportation study to identify risk areas and transportation behaviors.	New	Yes	2	2	3	2	2	
				Wildfire					
73	Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.	New	No						
74	Routinely inspect the functionality of fire hydrants and provide documentation.	New	Yes	4	5	4	4	4	Currently do
75	Develop a vegetation management plan to reduce wildfire risk.	New	No						
76	Ensure that buildings have fire extinguishers and fire detectors installed.	New	Yes	3	4	3	3	4	

Additional Mitigation Actions

Mitigation Action	Hazard	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)
Insure BDAs are installed in larger buildings to increase radio signal for first responders (Repeaters)	Infrastructure / Utilities	3	4	4	3	4
Ohio Fire Code and NFPA Standards along with International Building Code should be adopted County wide to provide consistency across jurisdictions.		4	4	4	4	4
County, local and should continue to work with State and Federal agencies on transportation issues	Transportation	3	4	4	3	3

City of Ravenna Surveys

Name & Organization: Geoffrey Cleveland Ravenna Fire Dept

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☑ Help with risk + resilience for community water systems per EPA guidlines

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Geoffrey Cleveland Ravenna Fire Dept

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	2
2. Flooding	1
3. Drought and Extreme Heat	4
4. Earthquakes	0
5. Tornadoes	2
6. Active Aggressor	5
7. Severe Winter Weather	2
8. Infrastructure / Utility Failure	5
9. Severe Summer Weather	4
10. Hazardous Materials	2
11. Invasive Species	1
12. Transportation	2
13. Epidemic	1
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	0
15. Wildfire	0

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

City of Streetsboro Surveys

City of Streetsboro

Ryan Shackelford <RShackelford@portageco.com>

Wed 10/28/2020 12:37 PM

To: Brett Morris <bmorris@burtonplanning.com>

Bre. ,

Below is the response from the City of Streetsboro. If you need anything further. Please let me know.

Streetsboro City: Contacted Kevin Grimm, Captain, Streetsboro FD on 10/28/2020 1410:

Projects Iden. fied:

Project iden. fied in the 2015 plan is completed.

Project #1: Con nue to evaluate Engineering and other flood control op ons for Ānkers creek and flooding on SR 303.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

3

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

2

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

3

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

Project #2: Con nue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the City and off-site community partners.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

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5

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH 44266
rshackelford@portageco.com
Office: 330-297-3607
FAX # 330-297-4569

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PC OHS/EM: https://www.co.portage.oh.us/homeland-security-emergency-management
Portage Prepares: https://www.co.portage.oh.us/portage-prepares
Facebook: https://www.facebook.com/PortagePrepares
Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

Village of Garrettsville Surveys

Name & Organization: Chris Sanchez Garrettsville

HAZARD PRIORITIES

Instructions:
1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:
0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	
2. Flooding	
3. Drought and Extreme Heat	
4. Earthquakes	
5. Tornadoes	
6. Active Aggressor	
7. Severe Winter Weather	
8. Infrastructure / Utility Failure	
9. Severe Summer Weather	
10. Hazardous Materials	
11. Invasive Species	
12. Transportation	
13. Epidemic	

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	
15. Wildfire	

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: Chris Sanchez

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

-on going-

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

need further training on this

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

-on going- get that $

☐ Goal 4: Ensure good disaster communications.

PC IMAT! ☺ Social Media, iPAWS.

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

this is Ohio - the weather changes and can be severe. -on going-

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

FW: Garrettsville Village

Ryan Shackelford <RShackelford@portageco.com>

Tue 10/27/2020 8:40 AM

To: Brett Morris <bmorris@burtonplanning.com>

Project iden fied in 2015 is ongoing.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

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Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

Project #2: Evaluate engineering op ons and/or the removal of a dam to limit flooding along Eagle Creek in the Village.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

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5

Project #3: Review the poten. al of flood retrofi. ng and/or acquisi on and demoli on of the current Fire Sta□on within a FEMA Floodplain of Eagle Creek due to repe□□ve flooding of the sta□on and impacts to first response apparatus.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

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Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

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5

From: Ryan Shackelford
Sent: Monday, October 26, 2020 3:00 PM
To: Bre. Morris <bmorris@burtonplanning.com>
Subject: Garre. sville Village

Garre. sville Village: Contacted David Friess, Fire Chief Garrettsville 10/16/2020 1410 Projects Iden□ fied:

Project iden□fied in 2015 is ongoing.

Project #2: Evaluate engineering op□ ons and/or the removal of a dam to limit flooding along Eagle Creek in the Village.

Project #3: Review the poten□ al of flood retrofitting and/or acquisi on and demoli on of the current Fire Sta□on within a FEMA Floodplain of Eagle Creek due to repe□□ve flooding of the sta□on and impacts to first response

apparatus.

If you need anything further from the Village please let me know. Thank you.

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH 44266
rshackelford@portageco.com
Office: 330-297-3607
FAX # 330-297-4569

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Facebook: https://www.facebook.com/PortagePrepares
Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

Village of Hiram Surveys

MITIGATION ACTIONS SCORING MATRIX

Purpose

As part of the hazard mitigation planning process, communities are asked to identify specific projects and activities (mitigation actions) that will help their communities achieve the long-term outcomes related to specific hazards. The status of each previously identified mitigation action is reviewed during the Hazard Mitigation Planning Process to determine the progress being made towards the County's hazard-specific goals. New mitigation projects and actions are also identified in this process.

The purpose of the Mitigation Actions Scoring Matrix is to determine which mitigation actions are relevant to each of the communities within Portage County and to develop a corresponding action plan that describes how the mitigation actions will be implemented. Scores collected from this Mitigation Actions Scoring Matrix will be used to decide how the mitigation actions will be prioritized, administered, and incorporated into Portage County's existing planning mechanisms.

Instructions

To complete this matrix, please review each proposed mitigation action and indicate if it is applicable to your jurisdiction. If it is applicable, score it from 1-5 for each category described below. For each category, a rating of 1 is the lowest score, a rating of 3 is neutral/unsure, and a rating of 5 is the highest score.

1. **Applicable to your jurisdiction? – Write Yes or No** – to indicate if you think this mitigation action is applicable to your community or jurisdiction. If Yes, fill out the remaining columns; if No, do not fill out the remaining columns.
2. **Cost Effective – Rank 1 – 5** – the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.
3. **Technically Feasible – Rank 1 – 5** – the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
4. **Environmentally Sound – Rank 1 – 5** – the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.
5. **Immediate Need – Rank 1 – 5** – whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.
6. **Risk Reduction – Rank 1 – 5** – the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

In addition, if there are any mitigation actions that are not listed that should be included, please add them, and score them on the last page. We encourage you to consider regularly occurring problems for each hazard listed below and suggest mitigation actions for these problems. You may also list regularly occurring problems within your community without suggesting a mitigation action.

Each action is associated with a goal of the hazard mitigation plan. These goals are located on the back of this page for your reference as you complete this survey.

MITIGATION ACTIONS SCORING MATRIX

NAME:	JURISDICTION:

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Multiple Hazards								
1	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response.	Previous	Yes	5	5	3	5	4	
2	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	Previous	Yes	5	5	3	3	3	
3	Support local agency efforts to complete independent study NIMS training online.	Previous	Yes	5	5	3	4	3	
4	Create/update local emergency action plans (EAPs) as required by NIMS.	Previous	Yes	5	5	3	4	3	
5	Determine a schedule by which emergency support functions should be updated.	Previous	Yes	3	5	3	3	2	
6	Revisit emergency support functions update needs list and provide documentation.	Previous	Yes	3	5	3	3	4	
7	Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.	Previous	Yes	3	5	3	3	3	
8	Continue damage assessment training throughout the County and provide documentation.	Previous	Yes	5	5	4	3	3	
9	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	Previous	Yes	3	3	1	2	3	
10	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	Previous	Yes	3	3	1	1	2	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
11	Continue to push information on new emergency communications onto social media.	Previous	Yes	3	5	1	1	1	
12	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	Previous	Hiram Only	3	5	3	1	1	
13	Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.	Previous	Yes	3	5	3	1	1	
14	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	Previous	Yes	2	5	4	1	3	
15	Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.	Previous	Yes	3	5	1	1	3	
16	Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)	New	Yes	3	3	1	1	2	
17	Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff.	New	Yes	1	5	5	1	1	
18	Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New	Yes	1	5	3	1	1	
19	Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.	New	Yes	1	5	3	1	1	
20	Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather.	New	Yes	1	5	1	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Dam Failure								
21	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	Previous	Yes	3	3	4	2	4	
22	Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).	Previous	Aurora Only	3	5	3	1	1	
	Drought & Extreme Heat								
23	Encourage or mandate the use of local plants on public property (xeriscaping).	New	Yes	1	5	1	1	1	
24	Develop of list of criteria that triggers drought-related activities when met.	New	Yes	3	3	3	1	1	
25	Gather and analyze water and climate data to gain a better understanding of local climate and drought history.	New	Yes	1	3	1	1	1	
26	Install low-flow water saving faucets, toilets, and showers in public properties where possible.	New	Yes	5	5	5	3	1	
	Earthquakes								
27	Maintain a database to track community vulnerability to earthquake risk and provide documentation.	New	No						
	Epidemic								
28	Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.	New	Yes	5	5	3	5	3	
	Flooding								
29	Enhance wetland buffer requirements to help protect water quality.	Previous	Yes	3	5	4	3	3	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
30	Identify all repetitive loss/potential repetitive loss structures within Portage County.	Previous	Yes	3	5	3	2	2	
31	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	Previous	Yes	3	5	3	2	2	
32	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	Previous	Yes	3	3	3	2	2	
33	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	Previous	Yes	1	3	2	1	1	
34	Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.	Previous	Yes	3	5	1	1	1	
35	Implement corrective measures identified in the above actions.	Previous	Yes	3	3	2	1	1	
36	Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.	Previous	Yes	3	2	1	1	1	
37	Identify funding for cleaning and maintaining ditches and storm waterways.	Previous	Yes	3	3	3	3	3	
38	Clean and maintain ditches according to the determined cause.	Previous	Yes	3	3	3	3	3	
39	Fix storm pipes to improve stormwater management.	Previous	Yes	5	5	5	5	5	
40	Raise roadway profiles above flood elevation.	Previous	Yes	3	5	1	2	1	
41	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	Previous	Yes	3	5	1	3	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
42	Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.	New	Yes	3	3	3	1	1	
43	Require that floodplains be kept as open space.	New	Yes	3	3	3	1	1	
44	Complete a stormwater drainage study for known problem areas.	New	Yes	3	5	3	1	1	
45	Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.	New	Yes	3	5	3	1	1	
	Hazardous Materials								
46	Continue to review Tier II hazard materials reports as they are submitted.	Previous	Yes	5	5	3	5	4	
47	Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	Previous	Yes	3	5	3	5	5	
48	Review and update County Commodity Flow Study.	New	Yes	3	5	3	4	3	
	Infrastructure & Utility Failure								
49	Purchase and install backup generators for public buildings and critical facilities.	New	Yes	3	5	1	3	1	
	Invasive Species								
50	Complete an ecological and economic impact study for local and nearby invasive species.	New	Yes	1	5	2	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
	Landslides, Erosion, and Mine Subsidence								
51	Use GIS to identify and map landslide risk areas.	New	Yes	3	3	1	1	3	
52	Compile a complete list of any underground mines in the County.	New	Yes	3	5	1	3	1	
53	Limit or prevent development in identified risk areas.	New	Yes	3	3	3	3	3	
54	Acquire and demolish or relocate at-risk properties and infrastructure.	New	Yes	1	5	1	1	1	
	Severe Summer Weather								
55	Post warning signs at local parks, county fairs, and other outdoor areas.	New	Yes	2	5	1	1	3	
56	Install and maintain surge protection on critical electronic equipment.	New	Yes	5	5	1	5	5	
57	Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.	New	No						
58	Convert traffic lights to mast arms.	New	Yes	1	5	1	1	1	
	Severe Winter Weather								
59	Assess trees for their potential to injure people or damage property in public places.	Previous	Yes	3	5	1	3	3	
60	Ensure the development and enforcement of building codes for roof snow loads.	New	Yes	3	5	1	2	3	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
61	Use snow fences or "living snow fences" (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	New	Yes	3	5	3	2	2	
62	Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.	New	Yes	2	5	1	2	3	
63	Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.	New	Yes	1	5	1	1	1	
64	Plan for and maintain adequate road and debris clearing capabilities.	New	Yes	3	5	1	2	4	
	Terrorism								
65	Work with local and State law enforcement officials to identify risk areas in the County.	New	Yes	3	5	1	3	3	
66	Work with local and State law enforcement officials to identify best practices to mitigate identified risks.	New	Yes	3	5	1	1	1	
67	Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.	New	Yes	3	3	1	1	1	
	Tornadoes								
68	Require construction of safe rooms in new schools, daycares, and nursing homes.	New	Yes	3	5	1	2	2	
69	Conduct tornado drills in public buildings.	New	Yes	5	5	1	1	1	

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction?	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
70	Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.	New	Yes	3	5	1	1	2	
71	Distribute tornado shelter location information.	New	Yes	1	5	1	1	1	
			Transportation						
72	Complete a full transportation study to identify risk areas and transportation behaviors.	New	Yes	2	5	1	2	2	
			Wildfire						
73	Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.	New	No						
74	Routinely inspect the functionality of fire hydrants and provide documentation.	New	Yes	3	5	3	3	3	
75	Develop a vegetation management plan to reduce wildfire risk.	New	No						
76	Ensure that buildings have fire extinguishers and fire detectors installed.	New	Yes	3	5	1	2	2	

Hiram Village

Ryan Shackelford <RShackelford@portageco.com>

Thu 10/29/2020 12:14 PM

To: Brett Morris <bmorris@burtonplanning.com>

Bre. ,

Below is the response from the Village of Hiram. If you need anything further. Please let me know.

Hiram Village: Contacted Bill Byers, Fire Chief, Hiram FD spoke in-person on 10/19/2020:

Projects Iden. fied:

Project iden. fied in the 2015 plan is considered con. nuous/ ongoing.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

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5

Project #2: Review engineering studies and stormwater capaciĀes to develop plans to address flooding concerns on Hinsdale Street.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

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5

Project #3: Work to enact a tree management program and/or contractor to limit uĀlity disrup ons and impacts to people and property during high wind events.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

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Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

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Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

Project #4: Con nue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the Village and off-site community partners.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

5

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

5

Project #5: Con nue to maintain and enhance outdoor warning capabiliÃes for tornados and severe weather events.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

5

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

3

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

5

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH 44266
rshackelford@portageco.com
Office: 330-297-3607
FAX # 330-297-4569

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Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

Village of Mantua Surveys

FW: Mantua Village

Ryan Shackelford <RShackelford@portageco.com>

Tue 10/27/2020 8:38 AM

To: Brett Morris <bmorris@burtonplanning.com>

Project identified in the 2015 Plan is ongoing.

Cost Effective – Rank 1 – 5 – the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.

5

Environmentally Sound – Rank 1 – 5 – the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

2

Risk Reduction – Rank 1 – 5 – the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

3

Project #2: Review the potential and enact flood retrofitting and/or acquisition and demolition of businesses/ property within a FEMA Floodplain along the Cuyahoga River subject to repetitive flooding.

Cost Effective – Rank 1 – 5 – the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.

4

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.

3

Environmentally Sound – Rank 1 – 5 – the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduction – Rank 1 – 5 – the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

5

From: Ryan Shackelford
Sent: Monday, October 26, 2020 3:41 PM
To: Brett Morris <bmorris@burtonplanning.com>
Subject: Mantua Village

Brett,

Mantua Village: Contacted John Trew, Village Administrator via phone at 10/26/2020 1335: No answer, left voicemail.

Returned Call at 1535 following projects identified:

Project identified in the 2015 Plan is ongoing.

Project #2: Review the potential and enact flood retrofitting and/or acquisition and demolition of businesses/ property within a FEMA Floodplain along the Cuyahoga River subject to repetitive flooding.

If you need anything further from the Village please let me know. Thank you.

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH 44266
rshackelford@portageco.com
Office: 330-297-3607
FAX # 330-297-4569

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Facebook: https://www.facebook.com/PortagePrepares
Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

Village of Sugar Bush Knolls Surveys

FW: contact Sugar Bush Knolls

Ryan Shackelford <RShackelford@portageco.com>

Tue 10/27/2020 8:47 AM

To: Brett Morris <bmorris@burtonplanning.com>

current project for SBK from the 2015 plan as ongoing

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

4

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

3

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

Project #2: Increase road weight capacity to withstand first response vehicles and increase dry well capaciĀes for first responders responding to the Village.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

3

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

3

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

3

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

5

Project #3: Work with neighboring communiĀes to enact a tree management program to limit uĀlity disrup. ons during high wind events.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

4

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

4

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

Project #4: Work with the Portage County OHS/EM to enact the damage assessment so. ware solu on and disaster recovery educa on to ensure effec ve transi on from response and recovery and maximize local, state and federal programs for residents of the village.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

5

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

3

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

From: Ryan Shackelford
Sent: Monday, October 26, 2020 2:47 PM
To: Bre Morris <bmorris@burtonplanning.com>
Subject: FW: contact

Bre,

Sugar Bush Knolls: Contacted Elizabeth Hartley, Village Council member @ 10/26/ 2020 1342 via email.

Returned Call at approximately 1355, projects iden fied are below. To summarize:

Please keep the current project for SBK from the 2015 plan as ongoing. This summarizes here response in the first sentence.

Project #2: Increase road weight capacity to withstand first response vehicles and increase dry well capaci es for first responders responding to the Village.

Project #3: Work with neighboring communi es to enact a tree management program to limit u lity disrup ons during high wind events.

Project #4: Work with the Portage County OHS/EM to enact the damage assessment so. ware solu on and disaster recovery educa on to ensure effec ve transi on from response and recovery and maximize local, state and federal programs for residents of the village.

Please let me know if you need anything further from the Village. Thank you.

-Ryan

From: Elizabeth Hartley
Sent: Monday, October 26, 2020 2:27 PM

To: Ryan Shackelford <RShackelford@portageco.com>
Cc: sugar bush <sugarbushknolls@gmail.com>; Bill Elder <sugarbushknolls@aol.com>; Jeffrey Coffee <jac4coffee@gmail.com>
Subject: Re: contact

Hi Ryan,

Thank you for taking my call this morning and talking through some of the possibili es.

The Village s ll needs to work on a Disaster Management, Relief and Recovery Plan for the Village. I believe this is what was listed in the last Portage County Plan. Please keep this in the mix.

The Village has been talking about adding a dry well in the Village to aid the fire department(s) in case of an emergency. As we talked about, all but one of our roads, and specifically Lake Roger Dr., are currently in need of major work prior to this happening, as they cannot handle the weight of the trucks loaded with water.

We have been affected by tornados and high straight winds in the past and this is poten ally a problem in the future. As I men oned, there are a number of dead trees on the west side of Ferguson Road which could become a problem with electric and communica on lines, if they fall. Trouble is, the trees are in either Streetsboro or Franklin Township.

I do like the idea of training the Mayor, Clerk-Treasurer and Council in the use of the Disaster Recovery Repor ng App. Let me know when you'd like to visit a council mee ng. We meet the second Monday of each month. Currently we are mee ng in the garage of Eric Fink's offices in order to maintain social distancing.

I hope this will give you enough to work with for our submission this me around.

Call me if you have any ques ons.

Elizabeth

On Mon, Oct 26, 2020 at 1:41 PM Ryan Shackelford <RShackelford@portageco.com> wrote:

> Elizabeth,
>
> A. er repe ve a empts to contact the Village of Sugar Bush Knolls we are unfortunately at a crossroads. All incorporated areas in Portage County are mandated to par cipate in the Hazard mi ga on plan update. If they do not par cipate, removal from the plan could equal loss of opportunity in federal funding towards future projects. Please contact me directly at 330-297-3607 to close the project to ensure Sugar Bush Knolls is included. Thank you.
>
> ***Ryan T. Shackelford***
> *Director, Portage County Office of Homeland Security & Emergency Management*
> 8240 Infirmary Rd. Ravenna, OH 44266
> rshackelford@portageco.com
> Office: 330-297-3607
> FAX # 330-297-4569
>
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Facebook: https://www.facebook.com/PortagePrepares
Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

--
Elizabeth Hartley
Council Person (2009-Present)
The Village of Sugar Bush Knolls
sugarbushknolls.ehartley@gmail.com
http://sugarbushknollsohio.org/

Village of Windham Surveys

FW: Village of Windham

Ryan Shackelford <RShackelford@portageco.com>
Tue 10/27/2020 8:43 AM
Brett Morris <bmorris@burtonplanning.com>

Project iden. fied in the 2015 plan is ongoing.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

4

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

5

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

2

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

4

Project #2: Collaborate with local, county and state partners for the feasibility and construcĀon of a community tornado safe shelter for Windham Village.

Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

3

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

3

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

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Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

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Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

5

Project #3: Con. nue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the village and off-site community partners.
Cost Effec ve – Rank 1 – 5 – the cost effec veness of each proposed mi ga on ac on, with 5 being the most cost effec ve and 1 being the least cost effec ve.

5

Technically Feasible – Rank 1 – 5 – the feasibility of each proposed mi ga on ac on, with 5 being the most feasible and 1 being the least feasible.

5

Environmentally Sound – Rank 1 – 5 – the proposed mi ga on ac on in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.

5

Immediate Need – Rank 1 – 5 – whether each proposed mi ga on ac on is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.

4

Risk Reduc on – Rank 1 – 5 – the proposed mi ga on ac on on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribu on to risk reduc on and 1 being the least contribu on to risk reduc on.

5

From: Ryan Shackelford
Sent: Monday, October 26, 2020 2:54 PM
To: Bre. Morris <bmorris@burtonplanning.com>
Subject: Village of Windham

Windham Village: Contacted Rich Gano, Fire Chief Windham FD at 10/26/2020 1349: No answer le. voicemail.

Returned Call 1432, Projects Iden fied:

Project iden fied in the 2015 plan is ongoing.

Project #2: Collaborate with local, county and state partners for the feasibility and construc on of a community tornado safe shelter for Windham Village.

Project #3: Con nue to enhance Mass Causality Incident (MCI) procedures, training and exercises for MCI events that could happen in the village and off-site community partners.

If you need anything further for the Village please let me know. Thank you.

Ryan T. Shackelford
Director, Portage County Office of Homeland Security & Emergency Management
8240 Infirmary Rd. Ravenna, OH 44266
rshackelford@portageco.com
Office: 330-297-3607
FAX # 330-297-4569

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Twitter: https://twitter.com/portageprep
YouTube: https://www.youtube.com/channel/UCj610ODZDqBnmtfV1YpmvaQ

When the time to perform has come, the time to prepare has past.

Atwater Township Surveys

Name & Organization: John B. Kovacich ATWATER TWP

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: John B. Kovacich ATWATER TWP

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure 2	2
2. Flooding	3
3. Drought and Extreme Heat	4
4. Earthquakes	3
5. Tornadoes	4
6. Active Aggressor	4
7. Severe Winter Weather	2
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	4
10. Hazardous Materials	4
11. Invasive Species	3
12. Transportation	3
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	4
15. Wildfire	1

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: Lynn Whittlesey Atwater Twp. Trustee

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	2
2. Flooding	4
3. Drought and Extreme Heat	1
4. Earthquakes	0
5. Tornadoes	2
6. Active Aggressor	3
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	4
10. Hazardous Materials	5
11. Invasive Species	0
12. Transportation	5
13. Epidemic	3

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	0
15. Wildfire	0

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Name & Organization: Lynn Whittlesey, Attorney Tax Trustee

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

☐ Goal 4: Ensure good disaster communications.

Need to do something about numerous dispatching entities. I don't know how to resolve.

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☑ Health/Medical Issues in Public Health

☐

☐

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Charlestown Township Surveys

Name & Organization: DON HANNA - CHARLESTOWN FIRE

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: DON HANNA CHARLESTOWN FIRE

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	4
2. Flooding	2
3. Drought and Extreme Heat	3
4. Earthquakes	1
5. Tornadoes	5
6. Active Aggressor	5
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	3
10. Hazardous Materials	3
11. Invasive Species	4
12. Transportation	2
13. Epidemic	4
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	3
15. Wildfire	3

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

PORTAGE COUNTY

NAME: DON HANNA POSITION: AC CHARLESTOWN FIRE

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

Mantua Township Surveys

Name & Organization: JOHN FESTA MANTUA TOWNSHIP

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

ADD

☐ ✓ MANTUA TOWNSHIP FLOODING

☐ DITCHING

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: JOHN FESTA MANTUA TOWNSHIP

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	4
2. Flooding	5
3. Drought and Extreme Heat	1
4. Earthquakes	1
5. Tornadoes	4
6. Active Aggressor	3
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	5
9. Severe Summer Weather	3
10. Hazardous Materials	4
11. Invasive Species	4
12. Transportation	4
13. Epidemic	4
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	2
15. Wildfire	2

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?* FLOODING INFASTRUCTURE
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

PORTAGE COUNTY

NAME: JOHN FESTA POSITION: MANTUA TWP TRUSTEE

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

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27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

11 / MANTUA TOWNSHIP

☑ ONGOING

Paris Township Surveys

Name & Organization: Denise Smith, resident Paris Twp

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ Communicate to small political subdivision (twp) plans, goals, next steps [Goal #2]

☐ Goal #4

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Denise Smith, resident Paris Twp

HAZARD PRIORITIES

Instructions:
1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:
0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	4 Kirwin / West Branch Dam
2. Flooding	5
3. Drought and Extreme Heat	1
4. Earthquakes	2
5. Tornadoes	4
✗ 6. Active Aggressor	3
7. Severe Winter Weather	4
8. Infrastructure / Utility Failure	3
9. Severe Summer Weather	3
✗ 10. Hazardous Materials	2
11. Invasive Species	3
12. Transportation	1
13. Epidemic	4

* Camp Garfield/ Arsenal risk(s)

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	0
15. Wildfire	1
16. cyberattacks	1

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Randolph Township Surveys

Name & Organization: Val Norfolk / Randolph

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

- ☐ Utilize Portage County's strengths in case of famine d/t climate change – we have land + equipment –
- ☐ having a seed bank, list of farmers willing to change crops to feed community
- ☐ _____
- Mobile medical teams

- Outreach to help individual homes become more prepared for a variety of situations

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Val Norfolk / Randolph

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	
2. Flooding	(1)
3. Drought and Extreme Heat	
4. Earthquakes	
5. Tornadoes	
6. Active Aggressor	
7. Severe Winter Weather	
8. Infrastructure / Utility Failure	
9. Severe Summer Weather	
10. Hazardous Materials	(2)
11. Invasive Species	
12. Transportation	
13. Epidemic	(4)

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	
15. Wildfire	
16. Cyber attack	(3)
17. Famine	(5)
18 Radiation	

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Rootstown Township Surveys

Name & Organization: Dave McIntyre Portage Co. Dog warden & Rootstown Twp. Trustees

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☒ Goal 1: Ensure countywide implementation of the National Incident Management System.

Yes.

☒ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

ongoing Progress

☒ Goal 3: Coordinate local mitigation efforts in Portage County.

Yes ongoing

☒ Goal 4: Ensure good disaster communications.

Yes - Wens system, social media, TV.

☒ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

Continuing to look at Hazards, Identifying them

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Please provide any additional comments on the goals in the space provided below.

Name & Organization: Dave McIntyre - Deputy Warden & Rootstown Twp. Trustee

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	2
2. Flooding	3
3. Drought and Extreme Heat	3
4. Earthquakes	3
5. Tornadoes	4
6. Active Aggressor	4
7. Severe Winter Weather	5
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	3
10. Hazardous Materials	5
11. Invasive Species	2
12. Transportation	2
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	2
15. Wildfire	1

4/16/2020 2pm CORE Planning Meeting

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

Cyber - terrissom

PORTAGE COUNTY

NAME: Dave McIntyre POSITION: Deb Warden & Rootstown Twp. Trustee

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#7

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, July 31, 2020 1:39:39 PM
Last Modified: Friday, July 31, 2020 2:00:36 PM
Time Spent: 00:20:56
IP Address: 104.48.66.32

Page 1: Survey Purpose

Q1

Name and Organization

Name	**Jordan Michael**
Organization/Agency	**Rootstown Township**
Title/Position	**Zoning Asst.**
Email Address	**rootstownzoning@sbcglobal.net**

Page 2: Instructions

Q2

Multiple Hazards: Mitigation Action 1Previous Action: Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q3

Multiple Hazards: Mitigation Action 2Previous Action: Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q4

Multiple Hazards: Mitigation Action 3Previous Action: Support local agency efforts to complete independent study NIMS training online.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q5

Multiple Hazards: Mitigation Action 4Previous Action: Create/update local emergency action plans (EAPs) as required by NIMS.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q6

Multiple Hazards: Mitigation Action 5Previous Action: Determine a schedule by which emergency support functions should be updated.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q7

Multiple Hazards: Mitigation Action 6Previous Action: Revisit emergency support functions update needs list and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q8

Multiple Hazards: Mitigation Action 7Previous Action: Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q9

Multiple Hazards: Mitigation Action 8Previous Action: Continue damage assessment training throughout the County and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q10

Multiple Hazards: Mitigation Action 9Previous Action: Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q11

Multiple Hazards: Mitigation Action 10Previous Action: Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q12

Multiple Hazards: Mitigation Action 11Previous Action: Continue to push information on new emergency communications onto social media.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q13

Multiple Hazards: Mitigation Action 12Previous Action: (Hiram Only) Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q14

Multiple Hazards: Mitigation Action 13Previous Action: Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q15

Multiple Hazards: Mitigation Action 14Previous Action: Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q16

Multiple Hazards: Mitigation Action 15Previous Action: Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q17

Multiple Hazards: Mitigation Action 16New Action: Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q18

Multiple Hazards: Mitigation Action 17New Action: Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q19

Multiple Hazards: Mitigation Action 18New Action: Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q20

Multiple Hazards: Mitigation Action 19New Action: Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q21

Multiple Hazards: Mitigation Action 20New Action: Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**2**
Comments:	Could be added to the township Zoning Resolution if approved by the Trustees.

Q22

Multiple Hazards: Mitigation Action 21New Action: Perform a countywide sustainability study to draft long-term goals and document strategies related to combating climate change in the County to reduce greenhouse gas (GHG) emissions. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q23

Multiple Hazards: Mitigation Action 23New Action: Consider including green design standards in building codes.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q24

Multiple Hazards: Mitigation Action 24New Action: Identify areas in permitting processes that can be sped up for projects that meet certain environmental standards (green tape).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q25

Multiple Hazards: Mitigation Action 25New Action: Perform a countywide food system security study and draft a plan to improve local food access during hazard events.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q26

Multiple Hazards: Mitigation Action 26New Action: Work with the Ohio EPA and to identify GHG emissions at the County level. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 3: Dam Failure

Q27

Dam Failure: Mitigation Action 1Previous Action: For any identified, non-listed impoundments, determine the downstream risk should the facility fail.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q28

Dam Failure: Mitigation Action 2Previous Action: (Aurora Only) Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 4: Drought & Extreme Heat

Q29

Drought & Extreme Heat: Mitigation Action 1New Action: Encourage or mandate the use of local plants on public property (xeriscaping).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q30

Drought & Extreme Heat: Mitigation Action 2New Action: Develop of list of criteria that triggers drought-related activities when met.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q31

Drought & Extreme Heat: Mitigation Action 3New Action: Gather and analyze water and climate data to gain a better understanding of local climate and drought history.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q32

Drought & Extreme Heat: Mitigation Action 4New Action: Install low-flow water saving faucets, toilets, and showers in public properties where possible.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 5: Earthquakes

Q33

Earthquakes: Mitigation Action 1New Action: Maintain a database to track community vulnerability to earthquake risk and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 6: Epidemic

Q34

Epidemic: Mitigation Action 1New Action: Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 7: Flooding

Q35

Flooding: Mitigation Action 1Previous Action: Enhance wetland buffer requirements to help protect water quality.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q36

Flooding: Mitigation Action 2Previous Action: Identify all repetitive loss/potential repetitive loss structures within Portage County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q37

Flooding: Mitigation Action 3Previous Action: Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q38

Flooding: Mitigation Action 4Previous Action: Determine most appropriate, non-invasive corrective action for each repetitive loss structure.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q39

Flooding: Mitigation Action 5Previous Action: Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q40

Flooding: Mitigation Action 6Previous Action: Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q41

Flooding: Mitigation Action 7Previous Action: Implement corrective measures identified in the above actions.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q42

Flooding: Mitigation Action 8Previous Action: Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**3**
Comments:	Coordinate with township road superintendents, who may know examples of this being the case.

Q43

Flooding: Mitigation Action 9Previous Action: Identify funding for cleaning and maintaining ditches and storm waterways.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q44

Flooding: Mitigation Action 10Previous Action: Clean and maintain ditches according to the determined cause.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q45

Flooding: Mitigation Action 11Previous Action: Fix storm pipes to improve stormwater management.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**4**

Q46

Flooding: Mitigation Action 12Previous Action: Raise roadway profiles above flood elevation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**2**
Technically Feasible	**2**
Environmentally Sound	**2**
Immediate Need	**2**
Risk Reduction	**3**

Q47

Flooding: Mitigation Action 13Previous Action: Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	Not sure if applicable, but County might be aware of problem areas on the county roads

Q48

Flooding: Mitigation Action 14New Action: Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q49

Flooding: Mitigation Action 15New Action: Require that floodplains be kept as open space.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**3**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**3**
Comments:	Could be added to township Zoning Resolution if approved by Trustees.

Q50

Flooding: Mitigation Action 16New Action: Complete a stormwater drainage study for known problem areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**4**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**4**
Risk Reduction	**3**
Comments:	Potential areas to look at in Rootstown include Muzzy Lake, parts of Rootstown Road, and the allotment behind Firehouse Grill.

Q51

Flooding: Mitigation Action 17New Action: Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**2**
Risk Reduction	**4**
Comments:	Our township already mandates landscape islands for parking areas with 20 or more spaces. Vegetative buffers required only when adjacent to residential. Porous pavement not allowed currently, but we would like to give this consideration, however there is a concern about dust when conditions are dry.

Q52

Respondent skipped this question

Flooding: Mitigation Action 18New Action: Retrofit properties that suffer from frequent flash flooding utilizing available stormwater management techniques.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Q53

Flooding: Mitigation Action 18New Action: Identify ditches that can be dredged or treated with netting and other filtration systems to limit dirt flow, debris blockage and flooding.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 8: Hazardous Materials

Q54

Hazardous Materials: Mitigation Action 1Previous Action: Continue to review Tier II hazard materials reports as they are submitted.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q55

Hazardous Materials: Mitigation Action 2Previous Action: Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q56

Hazardous Materials: Mitigation Action 3New Action: Review and update County Commodity Flow Study.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q57

Hazardous Materials: Mitigation Action 4New Action: Create a radiological emergency plan for areas within a 50-mile radius of a nuclear powerplant. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 9: Infrastructure & Utility Failure

Q58

Infrastructure & Utility Failure: Mitigation Action 1New Action: Purchase and install backup generators in public buildings and critical facilities.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 10: Invasive Species

Q59

Invasive Species: Mitigation Action 1New Action: Complete an ecological and economic impact study for local and nearby invasive species.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 11: Landslides, Erosion & Land Subsidence

Q60

Landslides: Mitigation Action 1New Action: Use GIS to identify and map landslide risk areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q61

Landslides: Mitigation Action 2New Action: Compile a complete list of any underground mines in the County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q62

Landslides: Mitigation Action 3New Action: Limit or prevent development in identified risk areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q63

Landslides: Mitigation Action 4New Action: Acquire and demolish or relocate at-risk properties and infrastructure.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q64

Landslides: Mitigation Action 5New Action: Work with local representatives to map the locations of abandoned mines. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q65

Landslides: Mitigation Action 6New Action: Digitize old mine maps. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q66

Landslides: Mitigation Action 7New Action: Consider buying out, demolishing, and relocating properties built on top of abandoned mines.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q67

Landslides: Mitigation Action 8New Action: Provide ODNR with updated abandoned mine locations.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 12: Severe Summer Storms

Q68

Severe Summer Storms: Mitigation Action 1New Action: Post warning signs at local parks, county fairs, and other outdoor areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q69

Severe Summer Storms: Mitigation Action 2New Action: Install and maintain surge protection on critical electronic equipment.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q70

Severe Summer Storms: Mitigation Action 3New Action: Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q71

Severe Summer Storms: Mitigation Action 4New Action: Convert traffic lights to mast arms.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q72 **Respondent skipped this question**

Severe Summer Storms: Mitigation Action 5New Action: Provide informational packets (paper or digital) on micro and macro bursts to the public.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 13: Severe Winter Weather

Q73

Severe Winter Weather: Mitigation Action 1Previous Action: Assess trees for their potential to injure people or damage property in public places.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q74

Severe Winter Weather: Mitigation Action 2New Action: Ensure the development and enforcement of building codes for roof snow loads.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q75

Severe Winter Weather: Mitigation Action 3New Action: Use snow fences or “living snow fences” (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q76

Severe Winter Weather: Mitigation Action 4New Action: Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q77

Severe Winter Weather: Mitigation Action 5New Action: Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q78

Severe Winter Weather: Mitigation Action 6New Action: Plan for and maintain adequate road and debris clearing capabilities.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 14: Terrorism

Q79

Terrorism/Active Aggressor: Mitigation Action 1New Action: Work with local and State law enforcement officials to identify at risk areas in the County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q80

Terrorism/Active Aggressor: Mitigation Action 2New Action: Work with local and State law enforcement officials to identify best practices to mitigate identified risks.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q81

Terrorism/Active Aggressor: Mitigation Action 3New Action: Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q82

Respondent skipped this question

Terrorism/Active Aggressor: Mitigation Action 4New Action: Cybersecurity - Install server redundancies for public IT infrastructure. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 15: Tornadoes

Q83

Tornadoes: Mitigation Action 1New Action: Require construction of safe rooms in new schools, daycares, and nursing homes.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**3**
Risk Reduction	**5 (highest possible score, most cost effective)**
Comments:	Could be added to township Zoning Resolution, if approved by the Trustees.

Q84

Tornadoes: Mitigation Action 2New Action: Conduct tornado drills in public buildings.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q85

Tornadoes: Mitigation Action 3New Action: Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q86

Tornadoes: Mitigation Action 4New Action: Distribute tornado shelter location information.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Page 16: Transportation

Q87

Transportation: Mitigation Action 1New Action: Complete a full transportation study to identify risk areas and transportation behaviors.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q88

Respondent skipped this question

Transportation: Mitigation Action 2New Action: Improve public transportation and overall transportation access.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 17: Wildfire

Q89

Wildfire: Mitigation Action 1New Action: Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q90

Wildfire: Mitigation Action 2New Action: Routinely inspect the functionality of fire hydrants and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q91

Wildfire: Mitigation Action 3New Action: Develop a vegetation management plan to reduce wildfire risk.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q92

Wildfire: Mitigation Action 4New Action: Ensure that buildings have fire extinguishers and fire detectors installed.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**5 (highest possible score, most cost effective)**
Technically Feasible	**5 (highest possible score, most cost effective)**
Environmentally Sound	**5 (highest possible score, most cost effective)**
Immediate Need	**3**
Risk Reduction	**4**
Comments:	Aren't fire departments already doing this?

Page 18: Additional Mitigation Actions (Suggest Your Own)

Q93

Rate and describe any additional mitigation actions you would like to see in your community below.

Respondent skipped this question

Q94

Rate and describe any additional mitigation actions you would like to see in your community below.

Respondent skipped this question

Q95

Rate and describe any additional mitigation actions you would like to see in your community below.

Respondent skipped this question

Other Surveys

Name & Organization: Muzzy Lake Inc, Sappwood Shores, Inc

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.
Good

☒ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster Pipe under E/W 76 Elevation

☒ Goal 3: Coordinate local mitigation efforts in Portage County.
Year over year Muzzy Lake Elevation

☐ Goal 4: Ensure good disaster communications.

☒ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County. Rootstown Development

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☒ N.E.O. College of Medicine

☒ Rootstown & Ravenna Township Connection

☒ Muzzy Lake Elevation

Name & Organization: Muzzy Lake Inc / Sapphwood Shores

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	
2. Flooding	5
3. Drought and Extreme Heat	
4. Earthquakes	
5. Tornadoes	
6. Active Aggressor	
7. Severe Winter Weather	
8. Infrastructure / Utility Failure — Sewer	4
9. Severe Summer Weather	
10. Hazardous Materials — Runoff / Silt	3
11. Invasive Species — Mosquitos	2
12. Transportation	
13. Epidemic — Disease from Mosquitos	1

Possible Additional Hazards	Priority Ratings (0-5)
14. Landslides, Erosion, and Mine Subsidence	
15. Wildfire	

Rt 5 Ramp Speed / Trucks 60-70 miles hr

Name & Organization: SUSAN LILLEY BLACKBROOK CONSERVANCY

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

HAVE NOT READ OR SEEN THIS. NOT ABLE TO FILL OUT

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☐ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☐ Goal 4: Ensure good disaster communications.

_____

☐ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ MANITOU TOWNSHIP – FLOODING

☐ – EROSION

☐ – DITCHING

– BLACK BROOK

Name & Organization: Susan Lilley Black Brook Conservancy

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	1
2. Flooding	5
3. Drought and Extreme Heat	2
4. Earthquakes	1
5. Tornadoes	1
6. Active Aggressor	4
7. Severe Winter Weather	3
8. Infrastructure / Utility Failure	4
9. Severe Summer Weather	4
10. Hazardous Materials	5
11. Invasive Species	2
12. Transportation	3
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	3
15. Wildfire	4

PORTAGE COUNTY

NAME: SUSAN LILLEY POSITION: BLACK BROOK PRESIDENT

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☑ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

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37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☑ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☑ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☑ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

Name & Organization: Alicia Beattie, Chagrin River Watershed Partners (CRWP)
* many Portage Co. communities are members of CRWP

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☐ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☐ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ Assist residents in understanding & addressing flooding issues (including ID funding options)
Ex) ↓flooding in Mantua Township along Mantua Center Road

☐ w/in Blackbrook Conservancy District
* refer to FEMA flood-HMGP Study application for advance assistance

☐ —road erosion—Mantua Center Road
& refer to Black Brook-NPS15 plan (Ohio EPA website)
Nonpoint Source Implementation Strategy plan

Name & Organization: Alicia Beattie, Chagrin River Watershed Partners

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	1
2. Flooding	5
3. Drought and Extreme Heat	3
4. Earthquakes	1
5. Tornadoes	1
6. Active Aggressor	2
7. Severe Winter Weather	1
8. Infrastructure / Utility Failure	3
9. Severe Summer Weather	4
10. Hazardous Materials	2
11. Invasive Species	5
12. Transportation	3
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	3
15. Wildfire	1

Additional Comments

- *Please consider how the hazards are grouped – should any be grouped together? Should any be made into its own category?*
- *Are there any hazards not listed that you would like to see included in the 2020 plan?*

- other hazards
  - loss of native habitat & biological diversity, protected lands ↳ like forests, wetlands, natural stream corridors
  - Stream erosion & channel modification (loss of natural stream morphology) & floodplain connection
  - Increases in impervious cover & more stormwater
- home septic treatment systems failing

PORTAGE COUNTY

NAME: Alicia Beattie POSITION: Chagrin River Watershed Partners

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	Need to focus on in county
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	roughly 2,000 pgs - Monthly review

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

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18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

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31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

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48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: 100	Aurora Branch Resto Project info at crwp.org
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

Name & Organization: WILLIAM BUCKBEE, KENT STATE UNIV.

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	3
2. Flooding	5
3. Drought and Extreme Heat	4
4. Earthquakes	1
5. Tornadoes	5
6. Active Aggressor	5
7. Severe Winter Weather	4
8. Infrastructure / Utility Failure	3
9. Severe Summer Weather	5
10. Hazardous Materials	4
11. Invasive Species	2
12. Transportation	1
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	1
15. Wildfire	1

Name & Organization: WILLIAM BUCKBEE, KENT STATE U.

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

_____

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

_____

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

_____

☑ Goal 4: Ensure good disaster communications.

_____

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

_____

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ _____

☐ _____

☐ _____

Name & Organization: Summit Co EMA

HAZARD PRIORITIES

Instructions:

1. Consider each hazard below.
2. Rate each hazard on a scale of 0 to 5 based on how important each hazard is to your community.
3. If a hazard should not be studied, give it a zero (0).
4. Provide any comments you would like to share regarding your selected ratings.

Priority Rating Scale:

0 = Not a Priority/Remove
1 = Lowest Priority
2 = Low-Medium Priority
3 = Medium Priority
4 = Medium-High Priority
5 = Highest Priority

2015 Hazards	Priority Ratings (0-5)
1. Dam/Levee Failure	5
2. Flooding - flash/river	5
3. Drought and Extreme Heat	4
4. Earthquakes	2
5. Tornadoes	4
6. Active Aggressor	3
7. Severe Winter Weather	5
8. Infrastructure / Utility Failure	5
9. Severe Summer Weather	5
10. Hazardous Materials	4
11. Invasive Species	2
12. Transportation	4
13. Epidemic	3
Possible Additional Hazards	**Priority Ratings (0-5)**
14. Landslides, Erosion, and Mine Subsidence	3
15. Wildfire	1
extreme cold	4
cyber	5

Name & Organization: Summit Co. EMA

GOALS SURVEY

It is important to revisit the goals and objectives from Portage County's 2015 Multi-Jurisdictional Hazard Mitigation Plan to help guide the current update to the plan. Please provide input on if these goals and objectives are still relevant. If a goal and the associated objective(s) are still applicable as written, please check (√) the box; if the goal or objective(s) needs to be modified or removed, please write how it should be modified or why it should be removed on the line below the goal.

Previous Goals (from the 2015 Plan)

☑ Goal 1: Ensure countywide implementation of the National Incident Management System.

☑ Goal 2: Ensure smooth transition from a local emergency to a state- and federally-declared disaster

☑ Goal 3: Coordinate local mitigation efforts in Portage County.

☑ Goal 4: Ensure good disaster communications.

☑ Goal 5: Continue to develop an understanding of the evolving nature of the hazards that could impact Portage County.

New Goals

If there are new goals and objectives that should be included, please write them on the lines below.

☐ an environment where participants can submit traditional & non traditional ~~ideas~~ methods of mitigation

☐ to protect critical infrastructure

Summit Co. EMA

PORTAGE COUNTY

NAME: POSITION:

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
1	Multiple Hazards	Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. [Ongoing training requirements]	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Multiple Hazards	Coordinate with the Ohio Emergency Management Agency (OEMA) and/or USDA/FEMA to determine the NIMS training levels that are required.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Multiple Hazards	Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Multiple Hazards	Support local agency efforts to complete independent study NIMS training online.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	Multiple Hazards	Create/update local emergency action plans (EAPs) as required by NIMS.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☒ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	need to focus on

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
6	Multiple Hazards	Determine a schedule by which emergency support functions should be updated.	7/1/2015 – 6/1/2016	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	Multiple Hazards	Review current emergency support functions to determine which are in the most need of updates.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	Multiple Hazards	Convene relevant planning meetings for the emergency support functions undergoing an update.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Multiple Hazards	Revise emergency support functions as necessary and re-distribute to partner agencies.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Multiple Hazards	Revisit emergency support functions update needs list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
11	Multiple Hazards	Work with previously-identified emergency action plan teams for the jurisdictions to create a jurisdictional standard operating guideline that is consistent with the County emergency operations plan.	7/1/2017 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
12	Multiple Hazards	Continue damage assessment training throughout the County.	7/1/2015 – 6/1/2016	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
13	Multiple Hazards	Set up an incident management team (IMT) for Portage County.	7/1/2015-12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
14	Multiple Hazards	Continue to support community emergency response team (CERT) training opportunities throughout the County.	7/1/2015-6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
15	Multiple Hazards	Explore funding options for incident command training locally from the Emergency Management Institute.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
16	Multiple Hazards	Create a training file of training opportunities and circulate it to all local jurisdictions and assist with the application and training process.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
17	Multiple Hazards	Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
18	Multiple Hazards	Update critical facilities lists by sending letters out to potential critical facilities.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
19	Multiple Hazards	Document attended training, identify future training needs, and identify resources for future needs for emergency action planning team members.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
20	Multiple Hazards	Identify and convene a planning committee to meet annually to review emergency support functions.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
21	Multiple Hazards	Determine which schools have access to radio communications and if said access is adequate for establishing contact with emergency authorities.	7/1/2015 – 6/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
22	Multiple Hazards	Compile a list of schools that do not have radio access.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
23	Multiple Hazards	Determine radio and other necessary equipment options for schools needing radios.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
24	Multiple Hazards	Identify funding sources for the purchase of school radios. Purchase and deploy the equipment. Provide training on the equipment.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
25	Multiple Hazards	Determine technological options that could enhance the County's emergency communications. Evaluate the feasibility of integrating these options.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
26	Multiple Hazards	Continue to push information on new emergency communications onto social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
27	Dam Failure	Obtain the existing state inspection list of all dams.	7/1/2015 – 6/1/2017	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
28	Dam Failure	Work with property owners throughout Portage County to determine if any impoundments exist that are not on the list.	7/1/2017 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
29	Dam Failure	For any identified, non-listed impoundments, determine the downstream risk should the facility fail.	As Identified – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Create a management system that collects and stores data on historical new flooding problems.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
30	Flooding	Identify all repetitive loss/potential repetitive loss structures within Portage County	7/1/2015 – 12/1/2015	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
31	Flooding	Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).	As Incidents Occur – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
32	Flooding	Determine most appropriate, non-invasive corrective action for each repetitive loss structure.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
33	Flooding	Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
34	Flooding	Obtain applicable cost estimates for identified options from the above actions. Identify potential sources of funding.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
35	Flooding	Implement corrective measures identified in the above actions.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
36	Flooding	Identify all ditches and storm waterways in Portage County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
37	Flooding	Determine if poor ditches and storm waterway maintenance is responsible for flooding in certain areas.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
38	Flooding	Identify funding for cleaning and maintaining ditches and storm waterways.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
39	Flooding	Clean and maintain the ditch according to the determined cause.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
40	Severe Winter Weather	Assess trees for their potential to injure people or damage property in public places.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
41	Severe Winter Weather	Review current tree management practices.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
42	Severe Winter Weather	Assess fiscal and human resources available to manage tree resources.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
43	Severe Winter Weather	Formulate and implement a tree risk management strategy (write a risk management program policy; trim and remove trees; create a tree risk rating system).	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
44	Extreme Heat and Cold	Compile relevant information on "preparedness tips" for temperature extreme events, and release the information through social media.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
45	Extreme Heat and Cold	Work with critical facilities regarding preparedness for such incidents as frozen pipes, ensuring continued access to heating and air conditioning, etc.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
46	Hazardous Materials	Continue to review Tier II hazard materials reports as they are submitted.	7/1/2015 – 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Hazard Type	Mitigation Action	Date Range	Status	Remarks	Comments
47	Hazardous Materials	Work with covered facilitiy representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.	7/1/2015 – 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
48	Hazardous Materials	Consider undertaking a commodity flow study to determine the types and quantities of hazardous materials transport through the County.	7/1/2015 – 6/1/2020	☒ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

VILLAGES AND CITIES

NAME: **POSITION:**

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
1	City of Aurora	Remove a dam along the Chagrin River, restoring the Aurora Branch in order to meet water quality standards (Aurora Branch Restoration Project)	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
2	Village of Brady Lake	Coordinate with the County OHS/EM to ensure local elected and other village officials are appropriately trained in the National Incident Management System (NIMS).	7/1/2015 / 6/1/2020	☐ Completed ☒ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
3	Village of Garrettsville	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
4	Village of Hiram	Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
5	City of Kent	Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.	10/1/14-12/31/19	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#	Jurisdiction	Mitigation Action	Date Range	Status	Remarks	Comments
6	Village of Mantua	Enhance wetland buffer requirements in order to help protect water quality.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☐ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
7	City of Ravenna	Fix storm pipes to improve storm water management (Area-Wide Storm Drain Improvement 2015-B).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
8	City of Streetsboro	Raise roadway profile above flood elevation (Tinkers Creek Project).	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
9	Village of Sugar Bush Knolls	Coordinate with the County OHS/EM to develop a standard operating guideline for the village during emergencies.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	
10	Village on Windham	Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.	7/1/2015 / 6/1/2020	☐ Completed ☐ Deleted ☐ Deferred ☐ Unchanged ☒ Ongoing	When: _____ Why: _____ Why: _____ Why: _____ % Complete: _____	

#2

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, July 23, 2020 1:09:08 PM
Last Modified: Thursday, July 23, 2020 1:47:30 PM
Time Spent: 00:38:22
IP Address: 174.232.13.40

Page 1: Survey Purpose

Q1

Name and Organization

Name	**Edward Grecol**
Organization/Agency	**UH Portage**
Title/Position	**Emergency Management**
Email Address	**edward.grecol@uhhospitals.org**

Page 2: Instructions

Q2

Multiple Hazards: Mitigation Action 1Previous Action: Create a training forum for the new National Incident Management System (NIMS) to limit confusion during disaster response. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q3

Multiple Hazards: Mitigation Action 2Previous Action: Make local agencies aware of NIMS classroom training opportunities from around the region and/or state.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q4

Multiple Hazards: Mitigation Action 3Previous Action: Support local agency efforts to complete independent study NIMS training online.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q5

Multiple Hazards: Mitigation Action 4Previous Action: Create/update local emergency action plans (EAPs) as required by NIMS.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q6

Multiple Hazards: Mitigation Action 5Previous Action: Determine a schedule by which emergency support functions should be updated.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q7

Multiple Hazards: Mitigation Action 6Previous Action: Revisit emergency support functions update needs list and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q8

Multiple Hazards: Mitigation Action 7Previous Action: Work with previously identified and new emergency planning members from the jurisdictions to create a jurisdictional emergency operations plan that is consistent with the County emergency operations plan.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q9

Multiple Hazards: Mitigation Action 8Previous Action: Continue damage assessment training throughout the County and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**2**
Environmentally Sound	**3**
Immediate Need	**3**
Risk Reduction	**4**

Q10

Multiple Hazards: Mitigation Action 9Previous Action: Promote interaction among local jurisdictions by creating a resource list and mutual aid agreements.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q11

Multiple Hazards: Mitigation Action 10Previous Action: Determine technological options that could enhance the County’s emergency communications. Evaluate the feasibility of integrating these options.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q12

Multiple Hazards: Mitigation Action 11Previous Action: Continue to push information on new emergency communications onto social media.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q13

Multiple Hazards: Mitigation Action 12Previous Action: (Hiram Only) Coordinate with the County OHS/EM, neighboring township, and Hiram College to develop an area-specific standard operating guideline for emergency operations.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q14

Multiple Hazards: Mitigation Action 13Previous Action: Coordinate with the County OHS/EM to develop a standard operating guideline for the City/village during emergencies.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q15

Multiple Hazards: Mitigation Action 14Previous Action: Public education and outreach recommending eco-friendly products for lawn and gardening activities to minimize chemicals in storm runoff.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q16

Multiple Hazards: Mitigation Action 15Previous Action: Work with critical facilities and local businesses regarding general preparedness for emergencies i.e. business continuity, active shooter, disaster recovery.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q17

Multiple Hazards: Mitigation Action 16New Action: Adopt the International Building Code and International Residential Code. (Need Building Dept Feedback.)If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q18

Multiple Hazards: Mitigation Action 17New Action: Plant trees on public properties to increase canopy coverage, reduce urban heat, and reduce stormwater runoff. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q19

Multiple Hazards: Mitigation Action 18New Action: Encourage the installation of green roofs, which provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q20

Multiple Hazards: Mitigation Action 19New Action: Install green roofs on public buildings to provide shade, remove heat from the surrounding surfaces and air, and absorb stormwater.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q21

Multiple Hazards: Mitigation Action 20New Action: Require minimum tree plantings in landscaping for new developments to reduce impacts from flooding, extreme heat, and severe summer weather. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q22

Multiple Hazards: Mitigation Action 21New Action: Perform a countywide sustainability study to draft long-term goals and document strategies related to combating climate change in the County to reduce greenhouse gas (GHG) emissions. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q23

Multiple Hazards: Mitigation Action 23New Action: Consider including green design standards in building codes.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q24

Multiple Hazards: Mitigation Action 24New Action: Identify areas in permitting processes that can be sped up for projects that meet certain environmental standards (green tape).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q25

Multiple Hazards: Mitigation Action 25New Action: Perform a countywide food system security study and draft a plan to improve local food access during hazard events.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q26

Respondent skipped this question

Multiple Hazards: Mitigation Action 26New Action: Work with the Ohio EPA and to identify GHG emissions at the County level. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 3: Dam Failure

Q27

Dam Failure: Mitigation Action 1Previous Action: For any identified, non-listed impoundments, determine the downstream risk should the facility fail.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q28

Dam Failure: Mitigation Action 2Previous Action: (Aurora Only) Remove a dam along the Chagrin River, restoring the Aurora Branch to meet water quality standards (Aurora Branch Restoration Project).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 4: Drought & Extreme Heat

Q29

Drought & Extreme Heat: Mitigation Action 1New Action: Encourage or mandate the use of local plants on public property (xeriscaping).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q30

Drought & Extreme Heat: Mitigation Action 2New Action: Develop of list of criteria that triggers drought-related activities when met.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q31

Drought & Extreme Heat: Mitigation Action 3New Action: Gather and analyze water and climate data to gain a better understanding of local climate and drought history.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q32

Drought & Extreme Heat: Mitigation Action 4New Action: Install low-flow water saving faucets, toilets, and showers in public properties where possible.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Page 5: Earthquakes

Q33

Earthquakes: Mitigation Action 1New Action: Maintain a database to track community vulnerability to earthquake risk and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Page 6: Epidemic

Q34

Epidemic: Mitigation Action 1New Action: Complete/Update a plan with the Public Health Department to better prepare for an epidemic or pandemic.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Page 7: Flooding

Q35

Flooding: Mitigation Action 1Previous Action: Enhance wetland buffer requirements to help protect water quality.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q36

Flooding: Mitigation Action 2Previous Action: Identify all repetitive loss/potential repetitive loss structures within Portage County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q37

Flooding: Mitigation Action 3Previous Action: Determine specific cause of flooding for each repetitive loss structure (water course, inadequate sewer capacity, etc.).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q38

Flooding: Mitigation Action 4Previous Action: Determine most appropriate, non-invasive corrective action for each repetitive loss structure.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q39

Flooding: Mitigation Action 5Previous Action: Assess other potential, more evasive strategies for corrective action (property buy-out/demolitions of affected structures, relocation, and water course).If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q40

Flooding: Mitigation Action 6Previous Action: Review advance assistance programs to conduct engineering or other studies to determine appropriate mitigation measures to undertake and associated costs.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q41

Flooding: Mitigation Action 7Previous Action: Implement corrective measures identified in the above actions.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q42

Flooding: Mitigation Action 8Previous Action: Determine if poor ditch and storm waterway maintenance is responsible for flooding in certain areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q43

Flooding: Mitigation Action 9Previous Action: Identify funding for cleaning and maintaining ditches and storm waterways.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q44

Flooding: Mitigation Action 10Previous Action: Clean and maintain ditches according to the determined cause.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q45

Flooding: Mitigation Action 11Previous Action: Fix storm pipes to improve stormwater management.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q46

Flooding: Mitigation Action 12Previous Action: Raise roadway profiles above flood elevation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q47

Flooding: Mitigation Action 13Previous Action: Coordinate with appropriate individuals at the County (e.g. County engineer) and state levels (e.g. ODOT) to determine problem areas with respect to flooding along ditches and other small streams.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q48

Flooding: Mitigation Action 14New Action: Propose enhanced stormwater infrastructure above industry standards to combat climate change and repetitive severe rain events.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q49

Flooding: Mitigation Action 15New Action: Require that floodplains be kept as open space.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q50

Flooding: Mitigation Action 16New Action: Complete a stormwater drainage study for known problem areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q51

Flooding: Mitigation Action 17New Action: Encourage or mandate the use of porous pavement, vegetative buffers, and/or landscaped islands in large (to be defined by jurisdiction) parking areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q52

Respondent skipped this question

Flooding: Mitigation Action 18New Action: Retrofit properties that suffer from frequent flash flooding utilizing available stormwater management techniques.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Q53

Respondent skipped this question

Flooding: Mitigation Action 18New Action: Identify ditches that can be dredged or treated with netting and other filtration systems to limit dirt flow, debris blockage and flooding.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 8: Hazardous Materials

Q54

Hazardous Materials: Mitigation Action 1Previous Action: Continue to review Tier II hazard materials reports as they are submitted.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**4**
Technically Feasible	**4**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q55

Hazardous Materials: Mitigation Action 2Previous Action: Work with covered facility representatives that are required to compile and submit off-site emergency plans to the County and ensure they do so.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**3**
Technically Feasible	**3**
Environmentally Sound	**3**
Immediate Need	**3**
Risk Reduction	**3**

Q56

Hazardous Materials: Mitigation Action 3New Action: Review and update County Commodity Flow Study.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q57

Hazardous Materials: Mitigation Action 4New Action: Create a radiological emergency plan for areas within a 50-mile radius of a nuclear powerplant. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 9: Infrastructure & Utility Failure

Q58

Infrastructure & Utility Failure: Mitigation Action 1New Action: Purchase and install backup generators in public buildings and critical facilities.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 10: Invasive Species

Q59

Invasive Species: Mitigation Action 1New Action: Complete an ecological and economic impact study for local and nearby invasive species.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 11: Landslides, Erosion & Land Subsidence

Q60

Landslides: Mitigation Action 1New Action: Use GIS to identify and map landslide risk areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q61

Landslides: Mitigation Action 2New Action: Compile a complete list of any underground mines in the County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q62

Landslides: Mitigation Action 3New Action: Limit or prevent development in identified risk areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q63

Landslides: Mitigation Action 4New Action: Acquire and demolish or relocate at-risk properties and infrastructure.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q64

Landslides: Mitigation Action 5New Action: Work with local representatives to map the locations of abandoned mines. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q65

Landslides: Mitigation Action 6New Action: Digitize old mine maps. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q66

Landslides: Mitigation Action 7New Action: Consider buying out, demolishing, and relocating properties built on top of abandoned mines.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Q67

Landslides: Mitigation Action 8New Action: Provide ODNR with updated abandoned mine locations.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Respondent skipped this question

Page 12: Severe Summer Storms

Q68

Severe Summer Storms: Mitigation Action 1New Action: Post warning signs at local parks, county fairs, and other outdoor areas.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q69

Severe Summer Storms: Mitigation Action 2New Action: Install and maintain surge protection on critical electronic equipment.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q70

Severe Summer Storms: Mitigation Action 3New Action: Adopt standard from the International Code Council-600 Standard for Residential Construction in High-Wind Regions.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N]/A

Q71

Severe Summer Storms: Mitigation Action 4New Action: Convert traffic lights to mast arms.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q72 **Respondent skipped this question**

Severe Summer Storms: Mitigation Action 5New Action: Provide informational packets (paper or digital) on micro and macro bursts to the public.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 13: Severe Winter Weather

Q73

Severe Winter Weather: Mitigation Action 1Previous Action: Assess trees for their potential to injure people or damage property in public places.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q74

Severe Winter Weather: Mitigation Action 2New Action: Ensure the development and enforcement of building codes for roof snow loads.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q75

Severe Winter Weather: Mitigation Action 3New Action: Use snow fences or “living snow fences” (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q76

Severe Winter Weather: Mitigation Action 4New Action: Organize outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q77

Severe Winter Weather: Mitigation Action 5New Action: Inform homeowners that letting a faucet drip during extreme cold weather can prevent the buildup of excessive pressure in the pipeline and avoid bursting.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q78

Severe Winter Weather: Mitigation Action 6New Action: Plan for and maintain adequate road and debris clearing capabilities.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Page 14: Terrorism

Q79

Terrorism/Active Aggressor: Mitigation Action 1New Action: Work with local and State law enforcement officials to identify at risk areas in the County.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**2**
Technically Feasible	**3**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q80

Terrorism/Active Aggressor: Mitigation Action 2New Action: Work with local and State law enforcement officials to identify best practices to mitigate identified risks.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Cost Effective	**2**
Technically Feasible	**2**
Environmentally Sound	**4**
Immediate Need	**4**
Risk Reduction	**4**

Q81

Terrorism/Active Aggressor: Mitigation Action 3New Action: Work with local and State election officials to strengthen election standards to prevent cyberterrorism or election interference.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Q82

Respondent skipped this question

Terrorism/Active Aggressor: Mitigation Action 4New Action: Cybersecurity - Install server redundancies for public IT infrastructure. If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 15: Tornadoes

Q83

Tornadoes: Mitigation Action 1New Action: Require construction of safe rooms in new schools, daycares, and nursing homes.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q84

Tornadoes: Mitigation Action 2New Action: Conduct tornado drills in public buildings.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q85

Tornadoes: Mitigation Action 3New Action: Determine tornado vulnerable locations for tornado shelters to be installed, this includes residential and community based 365 shelters and state park shelters.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q86

Tornadoes: Mitigation Action 4New Action: Distribute tornado shelter location information.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Page 16: Transportation

Q87

Transportation: Mitigation Action 1New Action: Complete a full transportation study to identify risk areas and transportation behaviors.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q88 **Respondent skipped this question**

Transportation: Mitigation Action 2New Action: Improve public transportation and overall transportation access.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Page 17: Wildfire

Q89

Wildfire: Mitigation Action 1New Action: Use GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q90

Wildfire: Mitigation Action 2New Action: Routinely inspect the functionality of fire hydrants and provide documentation.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q91

Wildfire: Mitigation Action 3New Action: Develop a vegetation management plan to reduce wildfire risk.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments: N/A

Q92

Wildfire: Mitigation Action 4New Action: Ensure that buildings have fire extinguishers and fire detectors installed.If you think this mitigation action is applicable to your jurisdiction, please rate the action based on the following categories and add any additional comments. If you do not think the mitigation action is applicable to your jurisdiction, please indicate "N/A" in the comment box.

Comments:	N/A

Page 18: Additional Mitigation Actions (Suggest Your Own)

Q93

Rate and describe any additional mitigation actions you would like to see in your community below.

Describe your mitigation action.:	N/A

Q94

Rate and describe any additional mitigation actions you would like to see in your community below.

Describe your mitigation action.:	N/A

Q95

Rate and describe any additional mitigation actions you would like to see in your community below.

Describe your mitigation action.:	N/A

Public Comment Surveys

#1

INCOMPLETE

Collector:	Web Link 1 (Web Link)
Started:	Friday, November 20, 2020 6:17:19 AM
Last Modified:	Friday, November 20, 2020 6:19:19 AM
Time Spent:	00:01:59
IP Address:	107.9.175.51

Page 2: Contact Information

Q1

Reviewer's Name

Todd Fassnacht

Q2

Reviewer's Jurisdiction

Randolph Twp

Q3

Reviewer's Phone Number

330-414-0279

Q4

Reviewer's Email Address

toddfassnacht@gmail.com

Page 3: Plan Review

Q5

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q6

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

No

Page 4: Plan Review

Q7

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q8

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 5: Plan Review

Q9

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q10

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 6: Plan Review

Q11

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q12

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 7: Plan Review

Q13

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q14

Respondent skipped this question

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Page 8: Plan Review

Q15

Respondent skipped this question

Please enter the specific plan page number and section, and then provide your comment.

Q16

Respondent skipped this question

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Page 9: Plan Review

Q17

Respondent skipped this question

Please enter the specific plan page number and section, and then provide your comment.

Q18

Respondent skipped this question

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Page 10: Plan Review

Q19

Respondent skipped this question

Please enter the specific plan page number and section, and then provide your comment.

Page 11: General Comments

Q20

Respondent skipped this question

Please enter your general comments here.

#2

INCOMPLETE

Collector:	Web Link 1 (Web Link)
Started:	Friday, November 20, 2020 8:50:25 AM
Last Modified:	Friday, November 20, 2020 8:51:13 AM
Time Spent:	00:00:48
IP Address:	74.141.96.189

Page 2: Contact Information

Q1

Reviewer's Name

Chief Randy Porter

Q2

Reviewer's Jurisdiction

Charlestown Township

Q3

Reviewer's Phone Number

330-607-4301

Q4

Reviewer's Email Address

chief1300cfd@gmail.com

Page 3: Plan Review

Q5

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q6

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 4: Plan Review

Q7

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q8

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 5: Plan Review

Q9

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q10

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 6: Plan Review

Q11

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q12

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 7: Plan Review

Q13

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q14

Respondent skipped this question

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Page 8: Plan Review

Q15

Respondent skipped this question

Please enter the specific plan page number and section, and then provide your comment.

Q16

Respondent skipped this question

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Page 9: Plan Review

Q17

Respondent skipped this question

Please enter the specific plan page number and section, and then provide your comment.

Q18

Respondent skipped this question

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Page 10: Plan Review

Q19

Respondent skipped this question

Please enter the specific plan page number and section, and then provide your comment.

Page 11: General Comments

Q20

Respondent skipped this question

Please enter your general comments here.

#3

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, November 24, 2020 10:19:50 AM
Last Modified: Tuesday, November 24, 2020 10:49:57 AM
Time Spent: 00:30:06
IP Address: 67.39.103.36

Page 2: Contact Information

Q1

Reviewer's Name

Ryan Shackelford

Q2

Reviewer's Jurisdiction

Portage County

Q3

Reviewer's Phone Number

3302973607

Q4

Reviewer's Email Address

rshackelford@portageco.com

Page 3: Plan Review

Q5

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**6**
Section	**Table 1.4**
Recommended Change	**Change Lake to Michael J. Kirwan Reservoir**
Reason for Change (if applicable)	**Actual name is reservoir not lake. same change needs to occur in paragraph directly below table.**

Q6	**Yes**
Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)	

Page 4: Plan Review

Q7

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**12**
Section	**Table 2.2**
Recommended Change	**Add IPAWS as a communication capability**
Reason for Change (if applicable)	**IPAWS has enhanced our emergency communication capability. I want to ensure it's captured.**

Q8	**Yes**
Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)	

Page 5: Plan Review

Q9

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**27**
Paragraph/Line	**Add Plan Participants to respective community**
Recommended Change	**Garrettsville Village: David Friess, Fire Chief / Windham Village, Rich Gano Fire Chief / Hiram Village, Bill Byers, Fire Chief / Mantua Village, John Trew, Village Administrator / Sugar Bush Knolls, Elizabeth Hartley, Village Councilwoman**
Reason for Change (if applicable)	**They were the actual participants in addition to direct outreach to respective elected officials**

Q10

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 6: Plan Review

Q11

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**28**
Section	**School listing table**
Recommended Change	**Add Maplewood Career Center**
Reason for Change (if applicable)	**Is a local 9 - 12 consortium school.**

Q12

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 7: Plan Review

Q13

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**32**
Recommended Change	**Discuss adding to the public comments section that the following was provided: Local Food Islands/ Resiliency. Discuss adding radiation response enhancements, and climate change**
Reason for Change (if applicable)	**directly discussed by community members, is captured in mitigation actions but not explicitly stated in the public comment period**

Q14

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 8: Plan Review

Q15

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**35**
Section	**Dams**
Recommended Change	**Add Whispering Pines Lake Dam as a class 1 dam.**
Reason for Change (if applicable)	**It is in the previous mitigation plan and emergency ops plan. Shultz lake is listed as a class 3. I sent a clarifying email, discuss further.**

Q16

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 9: Plan Review

Q17

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**64**
Paragraph/Line	**Beginning Paragraph**
Recommended Change	**States Village of Streetsboro, needs to be City of.**
Reason for Change (if applicable)	**Actual name**

Q18

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 10: Plan Review

Q19

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**65**
Paragraph/Line	**Loss of Life Paragraph**
Recommended Change	**typo, change flashfloods to flash floods, two words.**

Page 11: General Comments

Q20

Please enter your general comments here.

Page 93, 2014 tornado mentions the community of Earlville. This community does not exist. Maybe you meant shalersville?

Page 95. we had an EF-5 Tornado start in Portage County in 1985. everyone remembers it. maybe back date data slightly to capture it and/or add a paragraph recognizing it as a pretty significant event.

PG 107 Table 5.1 Add Active Aggressor next to Terrorism.
I've discussed separating active aggressor from terrorism repetitively but it does not appear to happen. I'd rank terrorism significantly less than an active aggressor/ shooter. While each incident has similarities they are different.

Pg. 122 - 131 appears redundantly added.

Page 132 City of, not village of Streetsboro

#4

COMPLETE

Collector:	Web Link 1 (Web Link)
Started:	Wednesday, November 25, 2020 1:40:53 PM
Last Modified:	Wednesday, November 25, 2020 2:06:35 PM
Time Spent:	00:25:42
IP Address:	70.62.148.90

Page 2: Contact Information

Q1

Reviewer's Name

Joseph Diorio

Q2

Reviewer's Jurisdiction

Portage County

Q3

Reviewer's Phone Number

3302969919

Q4

Reviewer's Email Address

jdiorio@portagehealth.net

Page 3: Plan Review

Q5

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**1**
Section	**1.1**
Paragraph/Line	**3**
Recommended Change	**Removal of Brady Lake as a Village**
Reason for Change (if applicable)	**It was incorporated into Franklin Twp**

Q6

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 4: Plan Review

Q7

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**2**
Section	**1.1.5**
Paragraph/Line	**1**
Recommended Change	**Removal of Brady Lake as a Village**
Reason for Change (if applicable)	**Franklin Twp**

Q8

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 5: Plan Review

Q9

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**4**
Section	**1.1.11**
Paragraph/Line	**last paragraph**
Recommended Change	**Rename of Ravenna Arsenal**
Reason for Change (if applicable)	**Name change**

Q10

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 6: Plan Review

Q11

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**7**
Recommended Change	**Brady Lake Village**
Reason for Change (if applicable)	**Franklin Twp**

Q12

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 7: Plan Review

Q13

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**30**
Section	**Hazard Profile**
Recommended Change	**Portage County Health District has updated plans**
Reason for Change (if applicable)	**These references seem old**

Q14

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Yes

Page 8: Plan Review

Q15

Please enter the specific plan page number and section, and then provide your comment.

Page Number	**100**
Section	**3.2.2**
Recommended Change	**Brady Lake Village**
Reason for Change (if applicable)	**Franklin Twp**

Q16

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

No

Page 9: Plan Review

Q17

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Q18

Do you have additional specific comments? (Select "Yes" to provide additional specific comments by page number/section; select "No" to move on to providing general comments.)

Respondent skipped this question

Page 10: Plan Review

Q19

Please enter the specific plan page number and section, and then provide your comment.

Respondent skipped this question

Page 11: General Comments

Q20

Please enter your general comments here.

Let Portage County Combined General Health District know if you need update Public Health Plans or questions. Thanks.