

1.0 THE PLANNING PROCESS

To develop a natural hazard mitigation plan that was reflective of Ottawa County's true hazards, risks, and vulnerabilities, the Emergency Management Agency utilized a comprehensive, whole community planning process that involved all local jurisdictions and invited the public to participate as stakeholders. This section describes the process utilized to develop the plan and how stakeholders and the community were included throughout the plan development process.

1.1 PLAN DEVELOPMENT

The current Ottawa County Natural Hazard Mitigation Plan was developed in 2016 and resulted in a plan approved through June 23, 2022; the process to update the plan would focus on changes, new or expanded hazards and new or worsened vulnerabilities. Any previous hazards or vulnerabilities that were determined to be invalid would be eliminated. Strategies to mitigate vulnerabilities would be updated to reflect community growth, new hazard and vulnerability identification, and recent damages. This work would begin in late fall 2021 and be completed by the time the current plan expired in late June 2022. This timeframe would include administration of the grant requirements, research into new hazards and risks, development of new mitigation strategies and actions and review of those included in the current plan, inclusion of all jurisdictions and stakeholders in the planning process, and completion of the plan review process at the state and federal level prior to local adoption. Each phase in plan development would include specific activities and steps, as described below.

1.1.1 Pre-Update Planning Process

Ottawa County's most recent mitigation plan was adopted on June 23, 2016 and expires on June 23, 2022. The county applied for and was awarded funding through the Hazard Mitigation Grant Program to update the current plan. The application identified the cities and villages in Ottawa County that would participate in the planning process. On February 19, 2021, Ottawa County received notification that their HMGP application had been approved for funding.

Upon award of the grant, Ottawa County EMA completed the appropriate procurement process to identify a contractor to manage the plan update project. On September 14, 2021, the county entered into a contract Resource Solutions Associates, LLC (further referred to as "Contractor") to coordinate activities, work with jurisdictions and community members to collect information, and develop the newly updated plan. The Contractor would also work with Ottawa County to obtain FEMA approval of the plan and to facilitate adoption by the jurisdictions.

The EMA Director and the Contractor developed a timeline for the project that began with completion of all administrative work and contract requirements by the end of 2021. Meetings with stakeholders were scheduled to begin in January and be complete by early February, but the restrictions on physical meetings would have to flex with current pandemic disease spread. The EMA would consult with Ottawa County Health Department regarding in-person gatherings, and any jurisdictional disease mitigation measures would be followed for meetings in their facilities. Communication with representatives from the islands (South Bass, Middle

Bass, North Bass, Put-in-Bay Village and Put-in-Bay Township) would be conducted digitally because from November through March, the ferry boats are out of service. Air transportation is very limited and expensive, and not a feasible option for multiple individuals to use. A draft updated plan would be released for public review in late March and submitted for FEMA approval in early April. This timeline would allow Ottawa County to have an approved plan in place before the current plan expired.

The stakeholder meetings were organized similarly to what was done in 2016. Jurisdictional meetings would be taken to each community to facilitate participation, and to provide time to personalize hazards and vulnerabilities to each community. Several county-wide gatherings would allow the jurisdictions to discuss the overall county-wide impact of threats and hazards. These larger meetings would also address the implementation of strategies to mitigate damages, and to facilitate a county-wide approach to mitigation. Local core planning committee members would be encouraged to discuss all phases of the plan with constituents, residents, and co-workers throughout the process, as well as asked to share digital surveys with others conversationally and electronically. All meetings and surveys would be open to the public, and officials were encouraged to share them.

The EMA established and maintained a countywide list of plan participants that included those who attended any mitigation meeting in the past, appointed and elected officials from every jurisdiction, chief officers from organizations and agencies active in the community, business representatives, and others who expressed interest. They added to the list as meetings were held. This contact list was used for notification of meetings, draft document review opportunities, and review periods throughout the planning process.

This list is included as an appendix to this section as Tab A.

Following is a list of the jurisdictions where meetings would take place. All meetings were open to all stakeholders, but there would be at least one meeting location that would be very convenient for each group. These locations were chosen based upon suitability for a rather large group, and accessibility, convenience of travel for the attendees, and availability. All meetings were scheduled for in person participation except the Lake Erie Islands, for reasons stated previously. The EMA held open the option to convert any meetings to digital ones based upon COVID-19 case numbers and the recommendation of the Ottawa County Health Commissioner or any local regulations that would be put in effect governing public meetings.

Table 1-1 Meeting Locations and Assigned Coordinator

Jurisdiction/Agency	Meeting Location of Convenience	Invitation Coordinator
City of Port Clinton	Port Clinton City Hall	Mayor and SS Director
Village of Clay Center	Genoa Village Hall	Mayor
Village of Elmore	Elmore Administration Building	Mayor and Administrator
Village of Genoa	Genoa Village Hall	Mayor and Administrator
Village of Marblehead	Marblehead Administration Building	Mayor

Village of Oak Harbor	Oak Harbor Administration Building	Village Administrator
Village of Put-in-Bay	ZOOM (due to transportation)	Mayor
Allen Township	Oak Harbor Administration Building	Township Fiscal Officer
Bay Township	Ottawa County EOC	Township Fiscal Officer
Benton Township	Oak Harbor Administration Building	Township Fiscal Officer
Carroll Township	Oak Harbor Administration Building	Township Fiscal Officer
Catawba Island Township	Ottawa County EOC	Township Fiscal Officer
Clay Township	Oak Harbor Administration Building	Township Fiscal Officer
Danbury Township	Ottawa County EOC	Township Fiscal Officer
Erie Township	Ottawa County EOC	Township Fiscal Officer
Harris Township	Oak Harbor Administration Building	Township Fiscal Officer
Portage Township	Ottawa County EOC	Township Fiscal Officer
Put-in-Bay Township	ZOOM (due to transportation)	Township Fiscal Officer
Salem Township	Oak Harbor Administration Building	Township Fiscal Officer
Ottawa County Sanitary Engineer	Ottawa County EOC	Sanitary Engineer
Ottawa County Engineer	Ottawa County EOC	Engineer
Ottawa County Regional Planning Commission	Ottawa County EOC	Regional Planning Director
Ottawa County Sheriff	Ottawa County EOC	Sheriff
Ottawa County Commissioners	Ottawa County EOC	County Administrator
Ottawa County Auditor	Ottawa County EOC	Auditor
Ottawa County Building Inspection	Ottawa County EOC	Ottawa Co. Chief Building Official
Erie-Ottawa Visitors and Convention Bureau	Lake Erie Shores and Islands Welcome Center	Director
Ottawa County Soil and Water Conservation	SWCD Offices	Director
Ohio Dept. of Natural Resources	Lake Erie Shores and Islands Welcome Center	Office Director
U.S. Coast Guard	Lake Erie Shores and Islands Welcome Center	Port Specialists
Energy and Gas Providers	Ottawa County EOC	Local Service Reps
Riverview Nursing Home	SWCD Offices	Director of Environmental Services
Adjoining County EMA Directors	All	EMA Director
School Superintendents	Ottawa County EOC	EMA Director
OSU Extension Service	SWCD Offices	EMA Director
General Public	All	EMA Director
Chambers of Commerce	Ottawa County EOC	EMA Director
Conservancy Groups	SWCD Offices	EMA Director

Local Media	All	EMA Director
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The chief official(s) from the jurisdiction served as the recipient of the invitations, and they were asked to invite other elected officials, employees, fire and police chiefs, and general public members from their jurisdiction to the meetings. This enabled chief officials to become the local advocate for participation, and allowed for more rapid and effective distribution of the invitations to all jurisdictional parties who might be willing to help. This chief official served as the coordinator of that particular meeting, making sure buildings were open, facilities were prepared, and people knew about the meeting.

Meetings were scheduled to include the core planning committee members and the general public. Many local officials are part-time and must combine their elected official duties with full-time jobs. Meetings were established in consideration of that limitation. Because coastal flooding and underground gypsum mines have caused highly escalated problems over the past five years, and the impact has increased significantly, a meeting was established to address those issues specifically.

Although some meetings were designed to address specific jurisdictions or hazards, attendees were asked if any other items of discussion were desired. Agendas were not limited to the target area or hazard. Representatives of any area, jurisdiction, or discipline were welcomed into the meetings of their choice.

A project timeline and key events schedule is attached as Tab B.

1.1.2 Project Implementation

Upon completion of all necessary grant agreements, contracts, and administrative requirements, the Contractor coordinated with EMA staff to revise and update the list of planning committee members from 2016. Staff changes and additions since the last plan activities were included, and new organizations were added. This list included representatives from all jurisdictions and a broad range of community organizations and agencies. This whole community-based Core Planning Committee was invited and encouraged to help consider hazards, vulnerabilities, and mitigation strategies for the entire county as well as specific jurisdictions. They were asked to complete two surveys, to review specific sections of the draft plan prior to release to the public for review, and to participate in the public review process of the entire plan.

Project Initiation

A significant change in hazard impact of coastal flooding, wind damage, and rainstorms during the past five years kept mitigation stakeholders in constant contact with one another. Extreme rises in the lake levels and frequent northeastern winds during storms had caused increased coastal flooding in Port Clinton, Erie and Carroll Townships, as well as Bay Township, Oak Harbor and Portage Township. Road damages from constant wave action and flooding had increased significantly in Marblehead, Lakeside, Danbury and Catawba Townships, and the village and townships on the Lake Erie Islands. They had met after several instances of flooding, and discussed damages, vulnerability, strategic actions, and funding opportunities. These

meetings were attended by jurisdiction officials and county and municipal department staff. Private business owners, property owners, and the general public had been involved in evaluating recent incidents, holding continual discussions about vulnerability and in developing solutions to flooding problems that had occurred. Initiation of the formal plan update project was a continuum of this ongoing activity for an already-engaged community.

The decision was made to initiate the project through electronic mail and the distribution of a survey that could provide a summary of information for each jurisdiction. Because the COVID-19 pandemic was producing extremely high local case numbers and hospitalizations due to the Delta variant, an in-person meeting of a large group would have been an unwise public health decision. Masking orders were in place for some participants, and public meetings were being held only when absolutely necessary by most parties. Some staff in government offices were working from home, or alternating office and home with other officemates. Virtual meetings were encouraged by the local public health officials. Therefore, the mitigation plan update announcement was done by email, and stakeholders were asked to complete two digital surveys that covered what a kick-off meeting would typically cover.

The first survey asked respondents to describe and characterize threats, and was distributed prior to the jurisdictional meetings. Respondents were asked to identify themselves and their jurisdiction or department, job title, and contact information. The survey asked about frequency, duration, speed of onset, magnitude, business impact, human impact, and property impact for drought/extreme heat, earthquake, flood, hazardous materials spill, infrastructure failure including dam failure, invasive species, land subsidence, severe thunderstorm, tornado/windstorm, and winter storm. They were asked if any of those hazards or impacts had worsened in the last five years, or if any of the same had improved. They were asked to prioritize hazards by identifying the three hazards that most impact the community, and the three that impact the community the least. They were also given an open blank to give any other information they felt was relevant, important, or not covered.

Thirty-seven surveys were returned prior to the jurisdictional meetings, including multiple surveys from municipalities, Ottawa County, and eight of twelve townships. The Village of Rocky Ridge did not participate in the first survey at that time.

The second survey was distributed after the jurisdictional meetings to allow for explanations and discussion prior to survey completion. This survey asked about each strategy in the 2016 plan, its status (completed, deleted, ongoing, or modified) and an explanation of that status. Respondents were also asked to add any additional strategies or ideas for strategies. For clarity and maximum benefit, jurisdictions asked if they could complete the surveys as a local group so they could discuss and agree upon responses; that request was approved by the EMA director. For the county's responses, departments met and completed the survey as a specific county department. Township trustees addressed the countywide strategies since they oftentimes work in conjunction with other townships and the county to mitigate vulnerabilities.

Surveys completed as small groups included five Ottawa County surveys, two from Put-in-Bay, one from Port Clinton, three from Oak Harbor, one from Marblehead, one from Genoa, one from Clay Center, two from Rocky Ridge, and one from Elmore.

Core Planning Committee Meetings

A series of face-to-face meetings were held, but efforts were made to avoid a COVID-19 super-spreader consequence by keeping meetings small in attendance and large in space used for the meeting. Due to very limited transportation to and from the Lake Erie Islands in winter months, the Put-in-Bay meeting was held digitally using interactive software with both audio and visual capability, as explained previously.

These meetings discussed the findings from the hazard survey and provided an opportunity for further description of changes or questions from the participants, the EMA Director or the Contractor. Discussion covered how participants perceived the characteristics and consequences of storms over the past five years. Were the storms more frequent or more severe, or less? Did storms come more frequently, or was there little change? How did the impact of storms compare today to that of five or ten years ago? Were there new hazards, damages that hadn't occurred in the past, or damages that were different from historical damages?

The strategy survey that would be sent immediately after the meetings was described, and questions about it were addressed. The second survey would address all mitigation strategies in the current plan, request assessment of progress for each one, and determination of the suitability of the strategy for the plan update. Topics covered in discussion included hazard review, vulnerability discussions, community impacts and mitigation strategies.

Two hazard-specific meetings were conducted. The first special group consisted of sanitary engineering staff, general engineering staff, township trustees, industry groups, and community members brought together to discuss land subsidence. This hazard developed approximately six years ago as abandoned gypsum mines in the eastern end of Ottawa County began to collapse and deteriorate, causing damage to highways, open land, and structures. Development plans for a whole-community neighborhood were abandoned as the voids underneath the surface caused likely instability and made the area inappropriate for residential and commercial development. Highway construction bore a huge cost of the collapsing mines as a major roadway was replaced, and then replaced again after surface failure due to the mines. Information in this meeting included engineering surveys, private landowner assessments and corrective actions, and grant application information used to apply for funding to help neutralize this hazard.

The second special group dealt with coastal flooding, a hazard that was always present in Ottawa County but was made far worse by lake levels that had risen by four to six feet over the past few years. A northeast wind combined with precipitation, in the presence of high lake levels, now causes flooding throughout downtown Port Clinton and all along the shoreline from the edges of Catawba Township through Carroll Township. The wind pushes waters back as far as Oak Harbor and Mud Creek in Bay Township as drainage of the Portage and Toussaint Rivers

into Lake Erie is impeded. All of these groups had met on an ongoing basis in recent years as lake levels rose, and a special group was developed for the mitigation plan update meeting. The EMA and Regional Planning offices had been very involved in past discussions, brainstorming sessions, and other meetings. They provided detailed information about plans for strategic intervention and mitigation measures that were being considered as well as those projects currently underway to protect property from coastal floods.

After these meetings were complete, the second survey was distributed regarding strategies. Jurisdictions asked to complete the surveys as a group because their internal discussion was necessary to provide accurate strategy status reports, comprehensive thoughts about new or continuing strategies, and potential funding sources. Each jurisdiction agreed to complete this step in the planning process.

The second survey asked for specific information about mitigation strategies and actions. Respondents were asked for their identity, agency, and job title. A few people completed it individually, but the municipalities completed the survey as small groups. Surveys listed the strategies that were included in the 2017 plan for their jurisdiction. The survey asked for progress regarding every strategy. Respondents were asked to determine if each strategy is currently ongoing, complete, deleted, or modified. They were given an open question to add any comments or additional strategies they wanted. The surveys were shared with multiple community members and stakeholders, and were tabulated in Microsoft tools.

Hazard and Risk Identification Development

The hazard and risk identification development phase included a combination of information obtained through stakeholder meetings and data research completed by the Contractor. The initial digital surveys dealing with hazard identification and risk assessment were summarized. Discussion notes from the meetings were assembled, and specific findings were summarized. The Consultant also focused additional efforts on research and information gathering from various data bases, news sources, and reports. Among sources of information were United States Census data bases, FEMA disaster incident reports, agricultural reports about crop damages, National Weather Service storm reports, and anecdotal news items researched online about major storms and floods in Ottawa County between 2017 and 2022.

This information was formally incorporated into the written Hazard Identification and Risk Assessment (HIRA) section of the updated mitigation plan.

When the HIRA was revised, the EMA director reviewed it. Upon his approval, it was distributed as a draft document to the Core Planning Committee for review and comment.

Mitigation Strategy Development

The second digital survey, combined with notes from the jurisdictional and countywide meetings, provided input into updating mitigation strategies. Several discussions with individuals about ongoing grant applications or projects, and sharing of documents related to those situations were shared with the Contractor. It was determined that although some

hazards seem to have enhanced impact and cause greater damages today than they did five years ago, the actual list of strategies in the current plan were, for the most part, inclusive of all potential corrective actions. A few suggestions for changes to wording were suggested, but other more significant changes were relatively minimal.

The strategy section of the plan was edited to reflect the new information.

When the strategy section draft was complete, it was reviewed by the EMA director and then distributed to the Core Planning Committee for their review and comment.

The Planning Process

The Contractor completed the Planning Process section of the plan based upon the project plan, timeline, and the process followed, and submitted a draft copy to the EMA director for internal review. The EMA Director and his staff reviewed the document and made suggestions for improvement. The EMA Director then shared the document, with changes, with the core planning committee for comment.

Final Plan Review

Plan review followed a multi-step process that allowed the Core Planning Committee to review the draft plan by section prior to public review. Committee members were asked to review the draft to facilitate focus on that particular information, and provide enhanced comments on specific components. The EMA director and Contractor felt that a tiered review process would better meet the availability of the committee members and result in more high-quality engagement.

The Core Planning Committee was provided with electronic access to the plan through the Contractor's website and were asked to provide feedback on a survey form posted for their use. The access was very simple to use, and there was no need to set up accounts to get access to the documents. Planning team members were asked to submit their feedback through the form provided on the website, or by email directly to the Contractor.

A printed copy of the draft plan was available in the Ottawa County EMA for anyone with limited computer access.

On March 29, the Core Planning Committee received email copies of sections of the plan to begin review before the public review period.

The draft plan was maintained on the Contractor's website, links to it were placed on the county's EMA website, and news articles were submitted to local newspapers (Port Clinton News Herald and the Sandusky Register.) The EMA used their social media to announce the review period and how to find a copy of the plan.

The two-week open public review period began on Thursday, March 31 and ended on Wednesday, April 13, as published in the Port Clinton News Herald and the Sandusky Register.

The general public was provided with electronic access to the plan through the Contractor's website. They were asked to submit their feedback through a form provided on the website or by email directly to the Contractor. They could also contact the EMA director at the EMA office.

A printed copy of the draft plan was available in the Ottawa County EMA for anyone with limited computer access.

The planning meetings culminated with a final core planning committee and general public meeting held at the Ottawa County EMA on April 6, 2022 to discuss the draft plan. At this final meeting, comments and questions received from the public were discussed and the planning team was provided with a final opportunity to submit feedback or suggest changes to the plan.

This extensive multi-week review period allowed for ample input and comment from Ottawa County stakeholders. It essentially encouraged feedback from March 15 through April 11. This enhanced period took into account relatively new hazard impacts, and the desire to obtain feedback on all aspects of mitigation possibilities

After changes were made in accordance with the public review, the plan was submitted to the Ohio EMA Mitigation Branch for state and federal review after which the formal adoption process, as explained in section 4.0 Plan Adoption, began.

1.2 STAKEHOLDER INVOLVEMENT

With Ottawa County's eight incorporated jurisdictions and a population of nearly 41,000, many stakeholders were identified as having a role in the mitigation planning process. The Core Planning Committee included broad participation from these identified stakeholders.

From the beginning of the planning process, the EMA attempted to include the whole community in the mitigation planning process. A broad, inclusive list of planning team members was developed with the intent to include any, every, and all agencies with an interest or role in emergency management, and thus in disaster mitigation. As the process unfolded and planning began, a whole community planning approach was used to achieve these goals.

The initial invitation to participate in the Core Planning Committee was extended to the following officials, leaders, and stakeholders from Ottawa County and adjacent jurisdictions:

- Incorporated jurisdictions (county, city, and village officials)
- Township representatives (trustees, fiscal officers)
- Specialized disciplines, including fire service, law enforcement, engineering, utilities, public health, healthcare, hospitals, business and industry, education and academia, nonprofits, social agencies, and the general public
- Specific appointed officials, including the county floodplain manager, GIS mapping specialist, conservation specialists, regional planning, building officials, development

officials, fire chiefs, police chiefs, public health commissioners, extension service workers

- Economic development organizations such as economic development corporations, chambers of commerce, and tourism and visitor’s bureaus
- Key elected officials such as the county auditor, treasurer, and commissioners
- Emergency management officials from the adjacent counties of Erie, Sandusky, Wood, and Lucas
- Non-profit agencies including American Red Cross, The Salvation Army, Citizen Corps and volunteer groups, and United Way as well as community action and volunteer groups
- Special interest groups such as watershed coalitions, conservancy districts, federal partners, state agencies with facilities in the county, and others with a special interest in the well-being of Ottawa County
- Residents, businesses, and the general public

1.2.1 Jurisdiction Participation

Every jurisdiction was presented with multiple opportunities to provide input during the planning process. Each jurisdiction was invited to a planning meeting near their jurisdiction. The Contractor and EMA directed conducted a meeting with each jurisdiction to provide opportunities for government officials, community agencies, and the public to provide input specifically related to disaster hazards, risks, and mitigation needs in their jurisdiction. **Tab B lists the meetings, locations, and jurisdictions that participated in each meeting.** Table 1-1 identifies the jurisdictions that participated in the hazard mitigation plan and their primary representative.

Table 1-2: Participating Jurisdictions and Representatives

Jurisdiction	Primary Representative	Position/Title
Ottawa County	Mark Coppeler	County Commissioner
Port Clinton City	Tracy Colston	Safety Service Director
Port Clinton City	Mike Snider	Mayor
Clay Center Village	Mel Sprauer	Mayor
Elmore Village	David Hower	Administrator
Genoa Village	Thomas Bergman	Mayor
Marblehead Village	Rhonda Sowers	Village Fiscal Officer
Oak Harbor Village	Randy Genzman	Village Administrator
Put-In-Bay Village	Darrell Long	EMS Chief
Rocky Ridge Village	Brenda Goetz	Mayor
Allen Township	Craig Blausey	Trustee
Bay Township	David Regal	Fire Chief
Benton Township	Gayle Millinger	Fiscal Officer
Carroll Township	Tina Biggert	Fiscal Officer
Catawba Island Township	Matt Montowski	Trustee
Clay Township	Elaine Konesky	Fiscal Officer
Danbury Township	Dave Hirt	Trustee
Erie Township	Louise Bice-Torres	Fiscal Officer

Harris Township	Laura Hazel	Fiscal Officer
Portage Township	Karl Kopchak	Trustee
Put-In-Bay Township	Matthew Miller	Trustee
Salem Township	Aaron Avery	Fiscal Officer

1.2.2 Hazard Mitigation Planning Team

Because Ottawa County’s intention was to encourage broad participation in the planning process, an expansive initial invitation list was developed. Using information from multiple sources, including EMA contact lists, jurisdiction and agency websites, the Board of Elections, and general online information, a master planning team was developed. For each contact, this master listed identified name, position, agency or jurisdiction, e-mail address, telephone number, and postal address. This list included representation from business and industry, community services, economic and community development, education, government, infrastructure and engineering, natural resources and agriculture, and public safety. Emergency management officials from adjacent counties were also included on the list. The complete list of invited and participating stakeholders is provided in Tab C. Communication with these individuals took place primarily through e-mail. When electronic communication was not feasible, postal mail and phone calls were utilized to share information with stakeholders and jurisdictions. Several elected and appointed officials changed during the course of plan development. In those instances, both officials are listed.

1.2.3 Planning Team Engagement

The Core Planning Committee activities included a combination of methods to collect information from officials and others. With the pandemic still raging through the county, extreme consideration was given to disease prevention, and therefore digital collection of data was utilized whenever it would be effective. This allowed in-person meetings to focus on information specific to new hazards, changing impacts, and strategies as well as unique input and feedback from the participants.

The key person in each jurisdiction or group was asked and encouraged to meet with their leadership and citizens to address the questions in the surveys and the content of meetings. They were encouraged to discuss the hazard assessment and risk analysis as well as mitigation strategies moving forward at their council, trustee, committee and commission meetings; and to forward the input from those residents to the person attending core planning group meetings. They were encouraged to share surveys, and to complete the digital surveys as a group to facilitate local conversation and participation in the updated mitigation plan.

All notices, emails, and announcements of mitigation planning meetings included information that the meetings were open to the public. The EMA Director and the Contractor provided their email addresses and phone numbers for sharing with local residents and officials for the purpose of providing input and feedback.

Two surveys were created to gather as much local input as possible, and to open the process to people who were unable to attend meetings. One survey asked for information that was used

to assess risk and vulnerability and is attached as Tab D Hazard Assessment Survey. This survey was completed by 37 individuals, some who attended meetings and others who were unable to attend.

The second survey was also openly available, and addressed feedback on the status of the 2015 plan strategies. This survey was completed jurisdictionally with a small group of individuals in each jurisdiction that had strategies in the 2015 plan. They were asked the status of each strategy and for additional feedback regarding how that strategy should or should not be included in the 2022 plan. All jurisdictions completed this survey, and it is attached as Tab E.

Meetings were held with special interest groups to address the increased impact from both coastal flooding and land subsidence. This allowed technical staff and officials to explain specific components of the hazard, damages from recent incidents, the potential impact of an incident in the future or an extension of what has already occurred, and the considerations caused by the hazard that impacted community development, land use, regulations, and budgeted projects. They were able to explain, in detail, the prompt and necessary actions taken to address the increased vulnerability to damages by certain jurisdictions, organizations, and businesses. These officials described the strategic approach to mitigation activities, and the work that had been done since the last mitigation plan was developed to address the issues.

In invitations and notices and during meetings, participants were advised that the mitigation planning process was open to the public. Meeting dates were announced to a wide audience and jurisdictions were encouraged to extend invitations to employees, community organizations, and residents. Participants were encouraged to forward and share announcements, notices, and information with coworkers, friends and neighbors, family, and community members as much as possible. Contact information for the EMA and Contractor was freely distributed to all participants as a means of asking questions, providing input, or otherwise becoming involved in the planning process.

1.3 PUBLIC PARTICIPATION

Garnering broad community participation in the mitigation planning process was a focus of the Contractor and EMA staff. Utilizing FEMA's whole community planning concept, the EMA reached out to a broad scope of community partners, jurisdiction officials, community partners, and local stakeholders. These representatives were invited to participate and provide input throughout the planning process. A significant amount of time was dedicated to identifying contacts across all areas and segments of the county and creating an accurate contact list of those individuals. Invitations and reminders were sent to the planning teams, and key jurisdiction/interest group leaders were asked to encourage participation. Participants were encouraged to share meeting information with colleagues and community members and encourage others to participate in the planning process.

Throughout the planning process, the public was invited to participate and provide input for the updated hazard mitigation plan. The EMA and Contractor attempted to be as inclusive and

broad-based as possible when developing the invitation lists and conversing with community leaders. A significant amount of time and research was devoted to identifying contacts across all jurisdictions, agencies, and organizations and creating an accurate contact list for those identified. Meeting invitations and reminders were repeatedly sent to the planning team and participants were encouraged to share meeting information with colleagues and community members and invite additional people to participate in the planning process.

To provide easy, convenient access to planning information for the committee and general public, a project website was created on the Contractor's website. As previously described in this section, this website was used to provide meeting dates and locations, contact information, mitigation planning resources, links to surveys and questionnaires, and access to draft plan documents for the planning team and general public. Planning team members and jurisdictions were encouraged to publish this link on their agency websites and social media accounts, providing the public with access to the planning process.

In all notifications, the EMA director informed attendees that meetings were open to the public and the process of updating the plan was completely transparent. They also shared that the current hazard mitigation plan was available for review on the project website. Participants were encouraged to review that document so that they could develop familiarity with previously identified mitigation strategies and compare that information to current risks and vulnerabilities when providing input into new mitigation strategies. Participants were also encouraged to share meeting invitations, notices, survey links, and other relevant information with colleagues, community members, and others that may have an interest in participating in the project.

A complete draft of the plan was posted on project website from March 28 through April 28, 2022 for a full month of public access to review period. A public review forum was held on April 6, 2022 to provide the community with the opportunity to comment on the plan in person and to ask questions about how to review the plan. All agency and jurisdiction representatives who participated on the planning team were notified of this review period by email. A notice was also sent to each participating jurisdiction with a certificate of mailing from the U.S. Postal Service. To notify the public, the EMA placed a paid legal notice in the Port Clinton News Herald that appeared on April 13, 2022.

Evidence of publication appears in Appendix C.

The EMA provided a notice and link to the plan on their agency website and social media accounts and asked other organizations to do the same. Several municipalities posted the notification on their website and social media sites, as well as in some offices. All notifications included a link to the website where the plan was available for review, the timeline for public review, and instructions for submitting comments. A printed copy of the plan was available at the Ottawa County EMA during regular business hours for anyone wishing to view and comment on the plan but with limited computer access, special needs, or other accessibility challenges.

1.4 RESEARCH METHODOLOGIES

A significant amount of research was performed to develop the hazard mitigation plan. Since Ottawa County's plan was approved in 2016, the Contractor obtained information and data from 2016 through 2021 (or latest published at the time) to ensure that the new plan included current, relevant, and accurate hazard and risk information. The Hazard Identification and Risk Assessment (HIRA) was developed by research of actual recorded events based on records from the National Climatic Data Center Storm Events Database. Supporting data was obtained from the Ohio EMA and FEMA websites. Planning team members provided context and information on the community impact of these events. The most significant events for each hazard are described in narrative form in the HIRA.

Appendix A includes a complete list of all recorded occurrences of each hazard, organized by type of hazard.

Vulnerability assessments were developed using HAZUS projections from the Ohio EMA Mitigation Branch. The Ottawa County Auditor and GIS Coordinator provided property valuations and mapping information. Current critical facility and key resource inventories were used to project loss estimates for those facilities. The 2016 Ottawa County Hazard Mitigation Plan was referenced for information that was still reflective of the county's risks, vulnerabilities, and conditions. In most instances, excepting land subsidence and coastal flooding, the 2016 plan was highly consistent with current factors and outcomes.

When projecting future losses, a look at past losses provided insight into the potential for destruction. FEMA historical documents were referenced to identify how many losses were reported, when, and because of what impact in the past. Taken into account in this estimation were possibility, probability, magnitude, and frequency of each category of hazard and its potential impact upon Ottawa County.

1.4.1 Studies, Reports, and References

Throughout the planning process, various reference materials were utilized. A list of these sources is provided in Table 1-2. Information from these existing documents and resources was incorporated throughout the hazard mitigation plan.

Information from the U.S. Census, Ohio Department of Development, Ottawa County Improvement Corporation, Ottawa County Emergency Operations Plan, and jurisdiction and agency websites were critical in developing the county and jurisdiction profiles in the HIRA. The Portage River Watershed TMDL report, Great Lakes Coastal Flood Study, Ottawa County floodplain regulations, FEMA disaster statistics, and other natural resource studies provided important information for the hazard identification and risk assessment. Hazard histories were developed utilizing information from NOAA's National Climatic Data Center, FEMA, and HAZUS. The most recent Ottawa County and State of Ohio mitigation plans provided supporting information used to develop mitigation strategies for the revised plan. In general, these documents and resources supported the development of the revised hazard mitigation plan by

providing information about Ottawa County and its characteristics; this information was necessary for the Core Planning Committee to review as they identified opportunities for mitigation and developed appropriate mitigation strategies.

Table 1-3: Studies, Reports, and References

Resource	Agency	Date
Ohio Earthquake Monitoring Network	Ohio Division of Natural Resources, Division of Geological Survey	
FEMA Disaster Statistics	Federal Emergency Management Agency	2016-2021
Great Lakes Coastal Flood Study	Federal Emergency Management Agency	2016
HAZUS Earthquake and Flood data	Obtained from Ohio Emergency Management Agency	2018
National Flood Insurance Program Community Status Book	Federal Emergency Management Agency	2016
NOAA Storm Events Database	National Oceanic and Atmospheric Administration	2016
Ottawa County Improvement Corporation Website	Ottawa County Improvement Corporation	
Ottawa County Land Use Plans	Ottawa County Regional Planning Commission	
Ottawa County, Ohio Profile	Ohio Department of Development	2015
Portage River Watershed TMDL Report	Ohio Environmental Protection Agency	2011
State of Ohio Enhanced Hazard Mitigation Plan	Ohio Emergency Management Agency	2019
United States Census Bureau Census Quick Facts	US Census Bureau	2016
Dam Inventory Data	Ohio Division of Natural Resources Dam Safety Program	2022
Levee Inventory and Risk Data	National Levee Database, US Army Corps of Engineers	2022
Community Rating System Description	FEMA	2021
Abandoned Underground Mines, Rockfall, and Landslide Inventory Data	ODOT	2020

1.5 PLAN MAINTENANCE

Diligent mitigation plan maintenance lays a solid groundwork for the required five-year update. By reviewing disaster occurrences on an annual basis and frequently assessing the county’s progress on mitigation activities, a five-year update can be a quick and efficient process. Upon approval of this plan, Ottawa County will set and follow a regular plan maintenance schedule. This effort, which will be led by the EMA and involve stakeholders, jurisdictions, and the community, will lay a solid foundation for the plan update in 2027.

1.5.1 Plan Maintenance Methodology

One of the challenges in conducting annual plan review meetings is the difficulty in holding meetings that many stakeholders perceive as unnecessary or not critical and, therefore, do not attend. Government officials, community leaders, and other key stakeholders also have busy

schedules and competing demands on their time and must and prioritize their time. Because Ottawa County is a small, rural community, many jurisdictions and organizations have only a few employees. In the villages and townships, the majority of the elected officials serve in a part-time or volunteer capacity. These staffing realities often make conducting community-wide meetings a challenge. Ottawa County's plan maintenance strategy attempts to address these barriers by incorporating other methods of communicating with stakeholders and collecting mitigation information throughout the five-year life of the plan.

Traditional face-to-face meetings have been the most common method to discuss disaster responses, catastrophic incidents, and storms. Given the challenges in scheduling these events, the county may choose to utilize webinars, conference calls, electronic surveys, and/or questionnaires to collect feedback from stakeholders. These options are utilized frequently in today's business environment and will be readily available to stakeholders. When these options are selected, stakeholders will be asked to dedicate the same attention to the task as they would if it were a traditional meeting. Records of participation, copies of results, and other communication surrounding these events will be maintained just as it would be for a traditional meeting.

Ottawa County found during the Pandemic of 2020 that meetings could be conducted virtually and have successful outcomes. Departments and agencies purchased meeting software and become accustomed to using it. Survey tools were used, then and in the update of this plan, and were able to successfully gather important information. The county will continue to use these methods to review, update and consider mitigation issues.

1.5.2 Annual Plan Review

The Core Planning Committee established for updating the plan will be called upon to review, evaluate, and discuss the plan annually, on or about the anniversary of plan approval by FEMA. In addition to annual review, ongoing county operations will ensure that mitigation efforts are placed at the forefront of new development across the jurisdictions.

The annual maintenance discussions may be conducted through traditional in-person meetings and through electronic surveys, questionnaires, and other forms of written communication. The choice of methodology will be at the discretion of the EMA Director and based on what best meets the needs of stakeholders, and what methodology ensures that the strategies identified in this plan are considered on a regular basis. Information-gathering efforts via both kinds of collection will include evaluation of the past year's disaster incidents, resulting damages and costs, and recovery efforts. It will include status reports on any mitigation projects in process and an update on progress towards achieving the mitigation strategies and actions developed by each jurisdiction. The EMA will maintain records of these annual discussions.

To implement the annual review, each jurisdiction will be asked to conduct an internal analysis of the mitigation strategies developed by their jurisdiction, and will be asked to submit a short report to the EMA with their findings. They will be asked to assess any disaster incidents that

have occurred during the year, summarize damages and recovery efforts, and evaluate the status of adopted mitigation strategies as a result of those incidents. If a strategy has been completed, the jurisdiction will evaluate its effectiveness at reducing losses. This information will be shared with the multi-disciplinary core planning team during the annual countywide review process. The EMA will maintain a summary of these reports and findings.

The core planning team will have the option, at the discretion of the EMA, to convene after a significant disaster or large-scale emergency to review and document any changes, needs, additions, or deletions that should be considered at the five-year update. Any time a disaster is declared in Ottawa County, it is suggested that the core planning team assemble after the incident is closed to review the plan with emphasis on the strategies and the status of each. The EMA will maintain records of these meetings and findings.

At each review point, the EMA will review the Hazard Identification and Risk Assessment for completeness and accuracy; loss estimates will be evaluated for ongoing accuracy and any significant developments will be added to the list. Key resources and critical facility lists will be assessed for additions or deletions and mitigation strategies will be reviewed for progress and effectiveness. All findings will be recorded and saved for the 2027 update process.

1.5.3 Community Participation and Plan Integration

While the plan maintenance process can be led by the EMA, the validity and quality of information is only as good as the participants make it. Ongoing county operations that are inclusive of mitigation strategies, evaluation, and revision are critical to creating a sustainable community. It is intended that all municipalities, jurisdictions, agencies, and organizations involved in developing the plan participate in its ongoing review and maintenance. The wide array of government officials and employees involved in the planning process will help ensure that all perspectives, from marketing and recruiting to implementation and mitigation, are included in the process. Without representation from all of the stakeholders involved in the planning effort, ongoing input will not be comprehensive or accurate. Therefore, all parties involved in developing this plan must perceive the annual review process as critical to the pre- and post-disaster welfare of the county.

Ottawa County has some recent history of hazard impact and vulnerability consequentially impacting community development. Stakeholders were able to cite specific projects that were abandoned, or otherwise made impossible or overwhelmingly expensive and therefore eliminated. The EMA will ensure that discussions between emergency management, community development, and code enforcement officials take place on a regular basis. They will all work together to find solutions to issues of vulnerability that prevent development which would serve in the best interest of Ottawa County residents.

Public involvement is an important component of ongoing mitigation planning efforts. To encourage public involvement in plan maintenance, notice of the annual plan review activities will be announced through local media and appropriate websites and social media accounts of participating jurisdictions and agencies. The general public will be invited to participate in

these activities and provide input. Meeting announcements will include the date, time, and location of the session and adequate notice so that people can reasonably make plans to attend. As with all meetings conducted during the mitigation planning process, annual update meetings will be open to the public and citizen input will be encouraged. If surveys and other electronic tools are utilized to collect feedback from stakeholders, these documents will also be made available to the community.

Local government feedback plays a major role in enforcing and implementing mitigation strategies. This happens not only during purposeful plan review, but also during daily operations that guide the growth and development of specific communities. Every village in Ottawa County has a planning commission or a development committee of council that deals with growth issues in the municipality, referencing regulations, development plans, and mitigation strategies as they lead their jurisdiction. These groups are responsible to the city administrator and mayor; the mayor is then responsible to work with the county officials that hold similar responsibility at that level of government.

The municipalities in Ottawa County all have planning commissions and committees of council members and residents that provide leadership for new development and business or residential growth in cooperation and compliance with Ottawa County development standards and goals. These commissions and committees determine what growth initiatives are implemented by the municipalities, and they provide leadership for recruiting, promoting, and securing new industries, businesses, and residential facilities. These groups work with the county officials who guide the construction of new buildings and homes, and who oversee and inspect new structures

Ottawa County municipalities are small and have limited full-time staff, so the county as an organization provides strong leadership and oversight of economic development, community development, and land use planning. Mitigation efforts are considered simultaneously with building code enforcement, zoning regulations, and land use rules at the county level. Many local officials wear numerous hats as they guide, direct, and facilitate local growth and development through regulation. There is significant overlap between county officials when it comes to growth and development, including plan approval, issuance of permits, and occupancy approval responsibilities.

The Ottawa County Chief Building Official enforces both residential and commercial building codes. He is also the Floodplain Manager, and works with the Regional Planning Director to help plan, approve, modify, and regulate new facilities, subdivisions, and neighborhoods not only in the context of building codes, but also with consideration for flood risk. The Regional Planning Director is the Enterprise Zone Manager for new development tax abatements and programs, and works with the Floodplain Manager to be sure new structures are not placed within flood risk zones without taking compensatory measures like elevation as early as the site development stage of construction. In turn, the Auditor manages the floodplain mapping and parcel identification and documentation by maintaining the GIS operations. The Chief Building

Official doubles back and requires the mitigation actions, like elevation, to be included properly in the submitted building permit and occupancy approval process.

The EMA Director, Ottawa County Engineer, and the Floodplain Manager/Chief Building Official are part of the planning committee that develops the Ottawa County Floodplain Management Plan. This plan, approved by FEMA in 2015, added the Engineer and EMA Director to the flood awareness and prevention task force. They work continuously with floodplain regulations, NFIP participation, CRS community ratings, and other thresholds that signify smart development measures directed at creating a sustainable community.

The Regional Planning Director sits on the EMA Disaster Response Team and the Davis-Besse Nuclear Power Station Response Team with many other county officials and community representatives, effectively linking the EMA to the Regional Planning Office.

The Ottawa County Engineer is responsible for county ditch maintenance, and that ties his office to the Soil and Water Conservation District Office as well as the Farm Service Agency director as agricultural drainage concerns are shared and resolved. The Floodplain Manager works with them to plan for ditch cleaning and other maintenance for the purpose of keeping vulnerable properties as protected and dry as possible. These officials work with the Floodplain Manager to check and evaluate the floodplain maps as introduced by FEMA to ensure accuracy through the map adoption process.

This complex web of jurisdictional representatives and officials helps Ottawa County engage in smart but aggressive development activities. As the strands of the web cross one another and intersect, mitigation strategies are included in the concerns from all directions. With an increased risk for flooding, making the lake both the friend and the foe, these officials work together to make wise choices in new ventures, enabling Ottawa County to grow and develop in effective and sustainable ways.

These are the same leaders who participated in the hazard mitigation plan revision in 2016, and will continue to meet with the EMA Director and other county officials on an annual basis to review the year's development plans. They will also work continuously to maintain, revise, and improve local land use plans, economic development and community growth plans, comprehensive land use planning, and other local planning efforts.

The county will also consider mitigation planning a part of all other community planning efforts and strive to include the concerns and challenges of disasters in all planning areas. The EMA will lead the effort to integrate disaster preparedness and mitigation planning into economic development, land use planning, land use regulation, conservation, response plans, and other plans that are important to the daily operation of the county. Disaster mitigation will be promoted as part of community development, making its way into a comprehensive array of disciplines and interests. Key stakeholders, including the County Commissioners, Economic Development, Regional Planning, Floodplain Administrator, Engineer's Office, zoning officials, and public safety officers from across Ottawa County will be important partners in this effort.

These individuals will work through their respective agencies to promote mitigation planning and its inclusion in the plans, procedures, guidelines, and priorities of each agency, thus making mitigation a true community-wide effort.

1.5.4 Documentation of Plan Maintenance

Ottawa County will consider communication with stakeholders and the public regarding hazard mitigation to be an annual necessity. It will be scheduled, completed, and recorded in order to facilitate an expeditious plan update in 2027 with accurate and relevant information. The county will also meet and consider damages, vulnerabilities, and strategies after significant incidents take place, especially those that have financial or social impact upon the community. Special effort will be taken to address hazard issues and vulnerabilities that negatively impact the health and well-being of county residents, or those hazard circumstances that prevent or lessen the success of community development and growth. The EMA will be responsible for recording and maintaining documentation of all ongoing plan maintenance activities. These records should include the date, time, and attendance at review meetings, findings of each review, and recommendations from stakeholders for changes, additions, or deletions at the next update. Results from any surveys and questionnaires used to collect information should be maintained, as well as reports submitted by jurisdictions. E-mail and written communication from stakeholders and the public should be saved for consideration during annual review activities. All reports, documents, and files can be saved electronically so that they are easier to find and less cumbersome to maintain.

1.5.5 Plan Update Cycle

The Ottawa County Natural Hazard Mitigation Plan will expire in 2027. With generous documentation of ongoing plan maintenance, the county should be positioned to submit an updated plan well before the current plan's expiration date. To ensure that the appropriate timeline is met, formal efforts to update the plan should begin by late 2026. The EMA Director will ensure that the appropriate and necessary steps are taken to complete this process.