

1.0 THE PLANNING PROCESS

To develop a natural hazard mitigation plan that reflects Logan County's true hazards, risks, and vulnerabilities, the Logan County EMA utilized a comprehensive, whole community planning process that involved jurisdictions and stakeholders from across the county. This section describes the process utilized to develop the plan and explains how stakeholders and the community were included throughout the plan development process.

1.1 PLAN DEVELOPMENT

Development of the mitigation plan was anticipated to be a twelve to eighteen-month process from the onset of the project. This timeframe was necessary to administer the grant, research hazards and risks, develop mitigation strategies and actions, include jurisdictions and stakeholders in the planning process, and complete the state and federal plan review process prior to adoption. Each phase of plan development included specific activities and steps, as described below.

1.1.1 Pre-Update Planning Process

Logan County's most recent mitigation plan was adopted on August 17, 2005 and expired in August 2010. The county began an update in 2012 but was ultimately unable to complete the project due to staffing restrictions and significant changes in the plan requirements. In 2015, the county re-engaged in the process when they applied for and were awarded a Pre-Disaster Mitigation Grant (PDM). Logan County EMA submitted an application to PDM in mid-2015 through the Ohio Emergency Management Agency. The application identified the jurisdictions in Logan County that would participate in the planning process. Discussions with jurisdiction officials ensued, garnering their willingness to participate in the update of the county's mitigation plan. On January 15, 2016, Logan County received notification that their PDM application had been approved for funding on January 5, 2016 and the performance period for the grant was May 29, 2015 through October 30, 2018.

Upon award of the grant, Logan County EMA completed the approved procurement process to identify a Contractor to manage the plan update process. In February, the county entered into discussion with Resource Solutions Associates, LLC to coordinate the project, work with jurisdictions and stakeholders to collect information, and develop the new plan. A contract was signed on February 24, 2016.

On February 24, 2016, the Logan County EMA Director met with Ohio EMA Mitigation Branch staff to review the requirements for plan development. The EMA and Contractor met that same day to develop a project timeline and to establish stakeholder contact list parameters. The timeline began with an initial planning meeting on April 5, 2016 and culminated with a completed plan submitted to Ohio EMA and FEMA for review in July 2017. This timeline would allow Logan County to have an approved plan in place by the end of 2017.

1.1.2 Planning Team Meetings

Upon completion of all necessary grant agreements, contracts, and administrative requirements, the Contractor coordinated with EMA staff to develop an initial list of planning team members. This list included representatives from all jurisdictions and a broad range of community organizations and agencies. Watershed group representatives, adjacent county EMA directors, and county nonprofit and educational entities were invited. A core group that had worked closely with the EMA Director to develop past plans were invited. The complete list of participating stakeholders is included as table 1-3 later in this section. This whole community-based Hazard Mitigation Planning Team met multiple times and in multiple configurations throughout the planning process. These meetings were conducted with four distinct purposes: project introduction to the stakeholders, hazard identification and risk assessment, mitigation strategy development, and plan review.

Project Kick Off

The initial planning meeting was held April 5, 2016 at the Logan County Engineer's Office in Bellefontaine. The purpose of this meeting was to introduce the project to stakeholders and jurisdictions and provide the planning team with an overview of the planning process. The Contractor explained the importance of the hazard mitigation plan and the process by which the EMA and Contractor would work with jurisdictions and stakeholders to develop the plan. Stakeholders were informed of the potential timeline of the project, and advised that the entire process was open to the public. Their input was requested to identify any absent or missed participants, and they were told how to contact both the EMA Director and the Contractor at any time.

Hazard and Risk Identification Work Sessions

The hazard and risk identification phase focused on research and information gathering. Work sessions were conducted in August 2016 with officials and representatives from each jurisdiction to discuss hazards, risks, vulnerabilities, and past disasters. These jurisdiction meetings focused on identifying the relevant hazards and risks and discussing the impact of disaster on each jurisdiction. Participants included mayors, administrators, city/village council members, trustees, fiscal officers, road/street department employees, law enforcement officials, fire service personnel, water and wastewater treatment facility staff, and other key jurisdiction employees. Local school districts, businesses, and residents were also invited to participate and provide feedback. These meetings were held in jurisdictions at village halls, community buildings, and other local public locations to be convenient for stakeholder participation and to make it possible for the greatest number of local residents to attend. Some meetings were held during daytime work hours for participants who helped as part of their jobs, and other meetings were held after work hours to allow volunteer officials and individuals to participate.

Focused group meetings were also conducted with stakeholders representing specific groups or interests, including agriculture, regional planning, economic development, engineering, infrastructure, public health and GIS. The purpose of these meetings was to gather detailed information from stakeholders with specific expertise in these subjects. The sessions focused

on gathering hazard and risk information and discussing the impact of disasters relative to each group's specific area of expertise. Again, these meetings were held at locations convenient to the participants during work hours to facilitate participation.

Mitigation Strategy Development Work Sessions

A second round of jurisdiction-level meetings was conducted in early April 2017. These sessions focused on identifying and developing mitigation goals and strategies based on the hazards and risks identified during the previous sessions. These meetings included the same broad scope of invitees as the hazard and risk identification meetings and provided a forum for local officials and residents to discuss specific actions to help reduce disaster risk in their community. Again, the meetings were held at locations and times convenient to the participants. These sessions also included a discussion on the mitigation strategies identified in Logan County's 2005 plan and any progress or status updates to those items. A few follow-up meetings were held in May to complete review of information and to include jurisdictions and individuals who had been unable to attend previously. By this time, all municipalities and townships in Logan County had in one way or another participated in the plan update process, and had provided input in various ways.

Final Plan Review

Following extensive input from the meetings and work sessions, the Contractor developed a draft plan. The planning team, jurisdictions and stakeholders were provided with electronic access to the plan through the Contractor's website and were asked to provide feedback. Planning team members and county residents were asked to submit their feedback through the form provided on the website or by email directly to the Contractor or the EMA Director. A printed copy of the draft plan was available at the Logan County EMA for anyone who chose to read a printed copy. Their comments would be received in any manner convenient to them.

A public review period was conducted in early July. From July 1 through 21, 2017, the plan was available electronically on the Contractor's website and in print form at the EMA for any member of the public to review and provide comments. As a third way to make the plan available for review, it was displayed in the Logan County EMA booth at the Logan County Fair from July 10 through July 16 from Noon until 8 p.m. each day. The Contractor and EMA Director were on site for a significant period within those days to discuss the plan in person with attendees. Comment cards were provided to submit written comments on the plan. This week-long fair provided stakeholders and the community with an additional and unique opportunity to review the mitigation plan.

The public was notified of the review period through news releases to local media outlets, letters to jurisdictions, posts on the EMA's website and social media accounts, and flyers and notices in county office buildings. Additionally, the EMA Director and Contractor were interviewed by a reporter from the Bellefontaine Examiner at the Logan County Fair and an article was published the next day. All news releases and notices included locations where the plan could be viewed electronically or in print as well as contact information for the Contractor and EMA staff.

The EMA Director reviewed all comments and questions received from stakeholders and the public; appropriate revisions were incorporated into the plan. After final revisions were complete, the plan was submitted to the Ohio EMA Mitigation Branch for state review. Upon state and federal approval, the formal adoption process began. This process is explained in section 4.0 Plan Adoption.

Table 1-1 includes a complete list of planning team meetings and work sessions conducted throughout the planning process.

Table 1-1: Planning Team Meetings

Date	Location	Purpose/Audience
02/24/2016	Logan County EMA	Meeting between EMA staff and Contractor to outline project
04/05/2016	Logan County Administration Building	Project Kick Off/Initial Planning Meeting
08/24/2016	Quincy Community Room	Quincy Jurisdiction Meeting #1 – Hazard and Risk Identification
08/25/2016	Bellefontaine City Hall	Bellefontaine Jurisdiction Meeting #1 – Hazard and Risk Identification
08/25/2016	Richland Township Hall	Belle Center/Huntsville/Richland Township/McArthur Township Jurisdiction Meeting #1 – Hazard and Risk Identification
08/25/2016	Rushsylvania Church of Christ	Rushsylvania/Rushcreek Township Jurisdiction Meeting #1 – Hazard and Risk Identification
08/29/2016	West Liberty Village Hall	West Liberty/Liberty, Union and Monroe Township Jurisdiction Meeting #1 – Hazard and Risk Identification
08/29/2016	Zanesfield Library	Zanesfield and Jefferson Township Jurisdiction Meeting #1 – Hazard and Risk Identification
08/30/2016	Logan County Engineer's Office	Infrastructure, Engineering and Natural Resources Group Meeting – Hazard and Risk Identification
08/30/2016	Logan County Engineer's Office	Economic and Community Development Group Meeting – Hazard and Risk Identification
08/30/2016	Russells Point Village Hall	Russells Point, Lakeview, and Washington and Stokes Township Jurisdiction Meeting – Hazard and Risk Identification
09/07/2016	Huntsville Village Hall	Huntsville Jurisdiction Meeting #1 – Hazard and Risk Identification
09/07/2016	Monroe Township hall	Monroe Township Jurisdiction Meeting #1 – Hazard and Risk Identification
09/07/2016	DeGraff Village Hall	DeGraff Jurisdiction Meeting #1 – Hazard and Risk Identification
01/09/2017	Ridgeway Fire Station	Ridgeway Jurisdiction Meeting #1 – Hazard and Risk Identification
04/15/2017	DeGraff Village Hall	DeGraff Jurisdiction Meeting #2 – Strategy Development

Date	Location	Purpose/Audience
04/15/2017	Quincy Village Hall	Quincy Jurisdiction Meeting #2 – Strategy Development
04/16/2017	Logan County Engineer’s Office	Engineering and Economic/Community Development Meeting #2 – Strategy Development
04/06/2017	Belle Center Village Hall	Belle Center and Richland Township Meeting #2 – Strategy Development
04/06/2017	West Mansfield Village Hall	West Mansfield and Rushcreek, Bokescreek, and Perry Township Meeting #2 – Strategy Development
04/10/2017	West Liberty Village Hall	West Liberty Jurisdiction Meeting #2 – Strategy Development
04/10/2017	Tri-Valley Fire Department	Valley Hi, Zanesfield Jurisdiction Meeting #2 – Strategy Development
04/11/2017	Bellefontaine Public Library	Bellefontaine Jurisdiction Meeting #2 – Strategy Development
04/11/2017	Logan County Engineer’s Office	Indian Lake, Rushcreek Township and Public Health and hazardous materials responder Meeting #2 – Strategy Development
04/11/2017	Lakeview Village Hall	Lakeview and Russells Point and Bloomfield and Stokes Township Meeting #2 – Strategy Development
05/26/2017	Logan County Tax Map Office	GIS and Tax Mapping Meeting – Vulnerability Assessment and Strategy Development
05/26/2017	Valley Hi Village Hall	Valley Hi Jurisdiction Meeting #2 – Strategy Development
07/10/2107	Logan County Fair – EMA Booth	Countywide public review period; plan on display July 10 – 16; Contractor present on July 10

1.2 STAKEHOLDER INVOLVEMENT

With thirteen incorporated jurisdictions and a population of approximately 45,168, many stakeholders in Logan County were identified as having a role in the mitigation planning process. The Hazard Mitigation Planning Team included broad participation from these identified stakeholders. All municipalities and townships, as well as county workers and residents were invited to participate, and many took advantage of that opportunity.

From the beginning of the planning process, the EMA attempted to include the whole community. A broad, inclusive list of planning team members was developed with the intention of including any, every, and all agencies with an interest or role in emergency management, and thus in disaster mitigation. The EMA Director and other emergency management advisors talked about the plan and the process to many people across the county, encouraging participation and input. As the process unfolded and planning began, a whole community planning approach was used to achieve these goals throughout the fifteen months it took to develop the plan.

The initial invitation to participate in the Hazard Mitigation Planning Team was extended to the following officials, leaders, and stakeholders from Logan 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, agriculture, agri-businesses, 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 agents
- Economic development organizations such as economic development corporations, chambers of commerce, regional planning officials and tourism and visitors' bureaus
- Elected officials such as the county auditor, treasurer, engineer, and commissioners
- Emergency management officials from the adjacent counties
- Non-profit agencies including American Red Cross, The Salvation Army, Citizen Corps, and United Way as well as community action 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 Logan County
- Residents, businesses, and the general public

1.2.1 Jurisdiction Participation

All incorporated jurisdictions in Logan County chose to participate in the countywide hazard mitigation plan. Participating jurisdictions include Bellefontaine, Belle Center, DeGraff, Huntsville, Lakeview, Quincy, Rushsylvania, Russells Point, Valley Hi, West Liberty, West Mansfield, and Zanesfield. Ridgeway, on the Logan-Hardin County line, chose to participate in the Hardin County plan due to watershed considerations.

Residents living outside of these incorporated jurisdictions are represented by the township level of government. Logan County has seventeen townships: Bloomfield, Bokescreek, Harrison, Jefferson, Lake, Liberty, McArthur, Miami, Monroe, Perry, Pleasant, Richland, Rushcreek, Stokes, Union, Washington, and Zane. While the county will officially adopt the plan on behalf of these townships, trustees, fiscal officers, and other officials were invited to planning team meetings and encouraged to participate in the planning process.

The officials identified in table 1-2 served as the primary contact for each jurisdiction. In cases where elected or appointed officials changed during the process of developing the plan, the new official was invited to participate as the office-holder. A few positions were vacant, and emails and notices were sent to the agency in general until a specific person was identified. They were all asked to notify other officials and residents within their jurisdiction of meetings and work sessions, and invite any other residents or officials to participate in the planning meetings. These jurisdictions were invited to the initial project kick off meeting in June 2016. Work sessions soliciting input and feedback in developing the HIRA, mitigation strategies, and

other parts of the plan were held in the jurisdictions for all to attend in both the fall of 2016 and spring of 2017. Jurisdictions were also invited to review the draft plan and participate in the final plan review prior to the plan's submission to state reviewers. The county fair review location was chosen for its convenience for township and municipal officials and residents. The EMA Director and Contractor scheduled the local work sessions with stakeholders.

Table 1-2: Participating Jurisdictions and Primary Representatives

Jurisdiction	Position/Title	Representative
Belle Center	Teresa Johnston	Mayor
Bellefontaine	Weston Dodds	Code Enforcement Officer
	Ben Stahler	Mayor
	Tim Notestine	City Engineer
	David Elliott	Wastewater Treatment Superintendent
	Vicki Stratton	Public Utilities Superintendent
	Tim Newland	Water Superintendent
	James Holycross	Safety Service Director
	Donn W. Volbrecht	Street Superintendent
DeGraff	Jennifer Bownan	Mayor
Huntsville	William Jenkins	Mayor
	Lori Fisher	Clerk
Lakeview	Pat Parish	Village Administrator
	Ryan Shoffstall	Mayor
Logan County	Todd Bumgardner	Engineer's Office
	Scott Coleman	Engineer
	Representative	Water Pollution Control District
	Deb Roberts	Soil and Water Conservation District
	Anthony Core	Commissioner
	Dustin Wickersham	Commissioner
	John Bayless	Commissioner
	Helen Norris	EMA Director
	Michael Yoder	Auditor
	Ken Etherington	Building Official
	Matt Stonerock	Logan County Health District
	Craig Kauffman	Logan County Health District
Logan-Union-Champaign Development	Dave Gulden	Director
Quincy	Sandra Ward	Clerk-Treasurer
	Cheryl Lozier	Citizen
	Chris Lozier	Citizen
	Bruce Stotter	Council Member
Rushsylvania	Katrina Eversole	Mayor
Russells Point	Tim Reese	Street Superintendent
	John Norton	Citizen
	Dianne Gauder	Clerk of Court – Mayor's Office
	Roger Brown	Code Enforcement Officer
	Joan Maxwell	Council and IJFD trustee
	David Wallace	Council Member
	Robin Reames	Mayor

Jurisdiction	Position/Title	Representative
	Sharon DeVault	Parks and Recreation Chairperson
Valley Hi	William Boy	Clerk-Treasurer
	Eric McCreary	Commission Member
West Liberty	Brenda Coy	Council Member
	Richard Mally	Council Member
	Greg Hostetler	Mayor (2016)
West Mansfield	Kim Kerns	Mayor (2017)
Zanesfield	Shari Watkins	Clerk-Treasurer
	Jeremy Watkins	County Member
	Heather Clapsaddle	Mayor
Bloomfield Township	Laura Magoto	Fiscal Officer
Bokescreek Township	Jennifer Wright	Fiscal Officer
Harrison Township	Judy Hartzler	Fiscal Officer
Jefferson Township	Heather Clapsaddle	Fiscal Officer
	Scott Armentrout	Trustee
	Gary Lockwood	Trustee
Lake Township	Douglas William Boy	Fiscal Officer
Liberty Township	John Christopher Fought	Fiscal Officer
McArthur Township	Brandi Alstaetter	Fiscal Officer
Miami Township	Thomas Weiskittle	Fiscal Officer
	Ron Furrow	Trustee
Monroe Township	Don Bradley	Trustee
	Keith LeVan	Trustee
Perry Township	Cindy Stalling	Fiscal Officer
Pleasant Township	Diana Gamble	Fiscal Officer
	Victor Klingelhofer	Trustee
Richland Township	Kevin Peterson	Trustee
	Phil Alloway	Trustee
	Gretchen Anderson	Fiscal Officer
Rushcreek Township	J. Andrew Johnson	Fiscal Officer
	Rick Kennedy	Trustee
Stokes Township	Joan Shouse	Fiscal Officer
Union Township	Rebecca Robinson	Fiscal Officer
Washington Township	Lisa Miller	Fiscal Officer
	Don Lewis	Trustee
	Jim Hurley	Trustee
Zane Township	Amie Raterman	Fiscal Officer

1.2.2 Hazard Mitigation Planning Team

Because Logan 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 of more than 100 invitees was developed. For each contact, this master list 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. For Logan County, this included county EMA officials in central and western Ohio. The complete list of invited and participating stakeholders is provided in table 1-3.

Table 1-3: Participating and Invited Stakeholders

Agency/Jurisdiction	Position/Title	Representative
Sidney City Schools	John Scheu	Superintendent
Triad Local Schools	Chris Piper	Superintendent
Urbana University Board	Bob Harrison	Board Member
Logan Co. Cooperative Power and Light	Doug Miller	Representative
Logan Co. Cooperative Power and Light	Scott Roach	Representative
Logan Co. Cooperative Power and Light	Rick Petty	Representative
Mary Rutan Hospital	Representative	Disaster Preparedness Coordinator
AGC	Jeannie Weiskittle	Representative
AGC	John Seeley	Representative
Fry Farms	Jerry Fry	Farmer
Heritage Cooperative	Megan Arthur	Representative
Honda of America	Brian Fry	Representative
Honda Transmission Manufacturing	Jerry Cline	Representative
Honda Transmission Manufacturing	Lee Sanders	Representative
Midwest Express	Representative	Representative
Nash Finch Company	Fire Chief	Representative
Transportation Research Center	Representative	Representative
Citizen	Bob Harrison	Citizen
Citizen Richard McGowan	Richard and Carol McGowan	Citizen
Indian Lake Chamber of Commerce	Pam Miller	Executive Director
Indian Lake Development Corporation	Dave Helgeson	President
Logan Co. Chamber of Commerce	Rick Gildow	Economic Development Director
Logan County CIC	Representative	Director
United Way of Logan County	Dave Bezusko	Executive Director
Adriel School	Todd Hanes	President/CEO
Bellefontaine City Schools	Brad Hall	Superintendent
Calvary Christian School	Ryan Hyde	Representative
Calvary Christian School	Ryan Hyde	Representative
Indian Lake Local Schools	Patrick O'Donnell	Superintendent
Ohio Hi Point Career Center	Robert Walker	Superintendent
Riverside Local Schools	Scott Mann	Superintendent
Darby Creek Association, Inc.	John Tetzloff	President
Indian Lake Watershed Project	Jack Webb	Executive Director
Logan County Farm Service Agency	Darin Leach	County Director
Logan County OSU Extension	Agent	Director
Mad River Steering Committee Inc.	Jennifer Ganson-Bowman	Watershed Coordinator

Agency/Jurisdiction	Position/Title	Representative
Miami Conservancy District	Sarah Hippensteel	Program Dev. Spec.
Upper Great Miami Watershed Project	Matt Clayton	Coordinator
Upper Scioto River Watershed Project	Ed Miller	Coordinator
Bellefontaine City	Brandon Standley	Police Department
Bellefontaine City	Andy Fissel	Fire Chief
Bokescreek Twp. Fire Dept.	Steve Fields	Fire Chief
DeGraff Fire Dept.	Ronald Pope	Fire Chief
Huntsville Fire Department	Tim Jenkins	Fire Chief; Building Inspector
Indian Joint Fire District	Mark Gibson	Fire Chief
Lakeview Fire Dept.	Norman Spring	Fire Chief
Logan County Sheriff	Ryan Furlong	Sgt./911 Services
Logan County Sheriff	Andrew Smith	Sheriff
Perry Twp. Volunteer Fire Dept.	Keith Montgomery	Fire Chief
Quincy-Miami Twp. Fire Dept.	Randy Kean	Fire Chief
Richland Twp. Fire Dept.	Ron Smith	Fire Chief
Ridgeway Fire Department	Nick Newland	Fire Chief
Rushcreek Twp. Fire Dept.	Don Crum	Captain
Rushcreek Twp. Fire Dept.	Dave Davis	Captain
Rushcreek Twp. Fire Dept.	Duane Vanbuskirk	Fire Chief
Russells Point Police Department	Joe Freyhof	Police Chief
Tri-Valley Fire Department	Luann Davis	Fire Chief
West Liberty Fire Department.	Conrad Hostetier	Fire Chief
West Liberty Police Dept.	Shane Oelker	Police Chief
Auglaize County EMA	Todd Anderson	Director
Hardin County EMA	Max Trachsel	Director
Champaign County EMA	Michael Kip	Director
Darke County EMA	Mindy Saylor	Director
Union County EMA	Brad Gilbert	Director
Shelby County EMA	Cheri Drinkwine	Director

1.2.3 Planning Team Engagement

The plan development schedule included four general sets of meetings and work sessions with additional small group meetings scheduled throughout. Because achieving meaningful participation from a wide range of partners through these sessions was important to the EMA and Contractor, the meeting schedule was developed to provide as many opportunities as possible for stakeholders to participate.

In rural counties, officials and workers often are responsible for multiple functions and have multiple authorities across jurisdictions. This is especially true for mapping and valuation responsibilities as well as development planning and construction approvals. These individuals work together on a regular basis, and they are accustomed to considering multiple objectives simultaneously. This multi-tasking was evident in meetings where various viewpoints were expressed, evaluated, and resolved.

Invitations to meetings and work sessions were sent to stakeholders by e-mail whenever possible as this was the most expedient and efficient method of delivering the information. With a very small staff, the EMA had limited time available to contact individual stakeholders by phone; therefore, the decision was made to utilize electronic mail as the primary notification method because of its speed and broad availability. If anyone notified the EMA or Contractor that they did not have e-mail access, postal mail was the alternative notification method. If an email was returned as undelivered, follow-up was initiated for corrective action. Any continuing communication issues were addressed individually.

In invitations 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. News releases announcing meeting dates and locations were sent to local media for print and online publication and flyers were posted in county and jurisdiction office buildings. Participants were encouraged to share announcements, notices, and information with coworkers, friend, neighbors, family, and community members as much as possible. Contact information for the EMA and Contractor was freely distributed to all participants so that all community members could ask questions, provide input, or otherwise become involved in the planning process.

Throughout the process, the planning team was encouraged to monitor Resource Solutions' project website, located at www.consultrsa.com under "Logan County Mitigation Plan", for access to meeting schedules, draft plan documents, meeting handouts, mitigation planning resources, contact information, and other resources relevant to the planning process. Planning team members were reminded of this resource during meetings and encouraged to share the information with additional colleagues and community members who may wish to participate. The website was utilized because the open format made content readily available to stakeholders and the public and because the Contractor could quickly and easily update the content, providing the planning team with up-to-date information. Participating jurisdictions were encouraged to post a link to the project website on their agency websites to further facilitate community input and feedback.

1.3 PUBLIC PARTICIPATION

Garnering broad community participation in the mitigation planning process was a focus of the Contractor and EMA. Utilizing FEMA's Whole Community Planning concept, the EMA reached out to a broad scope of community partners, jurisdiction officials, community partners, and stakeholders. These representatives were invited to participate and provide input throughout the planning process. This began with the development of a broad and inclusive planning team invitation. 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 team multiple times. Participants were encouraged to share meeting information with colleagues and community members and encourage others to participate in the planning process. During planning team meetings and

work sessions, notices were posted on doors to notify the public that the session was taking place and assist people in locating the sessions.

At the initial planning team meeting, the EMA Director and the Contractor informed attendees that all 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 the Contractor's project website from June 30 through July 21, 2017 for a three week public review period. The plan was also on display at the Logan County Fair in Bellefontaine from July 10 through July 16 at the Logan County EMA booth. The EMA director was on post at the fair for much of the week, and the Contractor was there on Monday, July 10 from noon until 8:00 pm for walk-in comments and questions. A box for comments was placed on the table at the EMA booth to receive written comments. A flyer with the digital posting address and how-to-comment directions was available on the table for anyone who wanted to review it at their convenience from home. Bellefontaine Examiner and WPKO, the local newspaper and radio station, published and broadcast news from the fair, and included information about the plan availability.

An official notice was also sent to each participating jurisdiction by postal mail. The EMA provided a notice and link to the plan on their agency website, social media sites, and asked other organizations to do the same. All notifications included a link to the website where the plan was posted, the timeline for public review, and instructions for submitting comments.

A printed copy of the plan was available at the Logan County EMA during regular business hours from June 30 through July 16, 2017 for anyone wishing to view and comment on the plan in person.

1.4 RESEARCH METHODOLOGIES

A significant amount of research was performed to develop the hazard mitigation plan, which is based on multiple sources of information. Research was conducted through reviews of existing data, plans, and reports and through interviews and conversations with county stakeholders and subject-matter experts.

Logan County's most recent plan was approved in 2005, but a local group of stakeholders did a great deal of work in 2012 to update that plan. When plan standards changed, the decision was made to discontinue those efforts and apply for funding to hire a Contractor to update the plan. The information collected in 2012 was made available to the contractor. The Contractor

obtained hazard information and data from 2005 through 2017 to ensure that the new plan included all current, relevant, and accurate hazard and risk information. Some information from the previous plan was transferred to this plan. All mitigation goals and strategies identified in that plan were evaluated and outcomes documented; those findings appear in section 3.0 of this plan.

Additional information was identified through research of recorded events from the National Climatic Data Center Storm Events Database. Incidents that were researched included data from previous plans, and new incidents after 2005 so that the most recent storms were included. Data was presented to the stakeholders represented on the planning team. Their knowledge of the impact, consequences, and recovery efforts of any past disaster incident was documented. These anecdotal points were included as appropriate in the revised plan.

The county profile includes information discovered through the study of various county documents. Information about community development, business and industry, land use regulations, and community life were researched and findings that were relevant to mitigation planning were included as parts of narratives and explanations. Online sources like US Census Bureau data were accessed for statistical data. Federal, state, and local government agency websites and reports were utilized for statistical and historic information.

The hazard identification was developed through research of actual recorded events based on records from the Storm Events Database of the National Climatic Data Center. Supporting data was obtained from the Ohio EMA, FEMA, Tornado History Project, Stanford University Dam Program, Ohio Department of Natural Resources, and other sources. Planning team members provided additional detail, context, and descriptions of the community impact for many historical incidents. 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.

The vulnerability assessment and risk analysis were informed by multiple data sources. HAZUS projections helped establish potential losses in flood incidents. The auditor provided property valuations for residential, commercial, agricultural, and exempt properties and mapping information. Current critical facility and key resource inventories were used to project loss estimates for those facilities. The 2005 Logan County Hazard Mitigation Plan contained information that was still reflective of risks, vulnerabilities, and conditions, which were retained in this plan where applicable. FEMA documents were referenced to identify how many losses were reported, when, and because of what impact in the past. Included in this estimation were possibility, probability, magnitude, and frequency of each category of hazard and its potential impact upon Logan County.

Logan County is GIS mapped but the sets of information that can be applied to those maps does not include property valuations. They have identified flood plains consistent with the most recent FEMA flood maps that were approved in 1974. While they can determine whether a particular parcel falls within the floodplain, they cannot link a tax value to that property. They

must use the parcel number to identify the parcel value in a completely different file. The GIS and parcel mapping options cannot be integrated with valuations; determination of valuation of parcels inside the floodplain is a manual, parcel-by-parcel activity.

Logan County's most current flood maps were developed in 1974. As more fully described in Section O2 HIRA, the 2014 proposed maps are under appeal by the county. This appeal has gone on for several years, and no resolution has been achieved to this date. Therefore, the most recent approved flood plain maps for Logan County are 1974 maps. The Logan County tax map office has a set of printed maps from 1974; the county has established a digital version of these maps, and local officials feel they are, in 2017, still valid and accurate maps. Therefore, Logan County still uses the 1974 maps as their most recent and approved floodplain determination. This results in challenges when meeting development and land use requirements, or when property owners apply for mortgages and loans. However, until the 2014 proposal appeal is resolved, this is the only option that exists.

A difficulty in this project was, due to the inability to tie property values to an identified set of parcels, establishment flood vulnerability for the plan in the context of absolute property valuations. With no link between parcels and flood plains, it was impossible to arrive at an absolute flood vulnerability calculation. However, through analysis of properties and past incidents, flood vulnerability was established that used the technology available today. HAZUS runs were provided by the State of Ohio when the county worked on a mitigation plan update in 2012, and even though those property values are likely out of date, the data was used to predict vulnerability.

Table 1-4 provides a list of the sources utilized in the research phase of this project.

Table 1-4: Studies, Reports, and References

Document	Author/Agency	Date
Greater Miami Watershed Discovery Report	FEMA	6/2011
Logan County Community Health Risk and Needs Assessment	Logan County Department of Health	2015
Environmental Quality Incentive Program (EQUP)	United States Department of Agriculture	2013
Federal Disaster Declaration Statistics	FEMA	2017
Ground Water Potential Pollution Study	US Geological Service	1989/ 2004 update
HAZUS Flood and Earthquake data	Ohio EMA	2012
Logan County CIC Economic Development Roadmap Plan	Logan Union Champaign Regional Planning	2009
Logan County Hazard Mitigation Plan 2005 and sections from 2013 update work	Logan County EMA	2005, 2013
Logan County Hazard Profile and Risk Assessment (Collection of local notes and research after severe storms and incidents dating back to approximately 2001)	EMA	2001

Document	Author/Agency	Date
Soil Survey of Logan County	USDA	1979
State of Ohio Enhanced Hazard Mitigation Plan	Ohio EMA	2014
Storm Events Database	NOAA	2017
United States Census	US Census Bureau	2010/2012
Western Ohio Cropland Values	Ohio State University	2014
Greater Upper Miami River TDML Report	Ohio Environmental Protection Agency	March 2012
Mad River TDML Report	Ohio Environmental Protection Agency	January 2010
Scioto River (Upper) TDML Report	Ohio Environmental Protection Agency	July 2014
Bokes Creek TDML Report	Ohio Environmental Protection Agency	September 2002
Mill Creek TDML Report	Ohio Environmental Protection Agency	September 2003

1.5 PLAN MAINTENANCE

Plan maintenance is a critical element of the hazard mitigation plan. Diligent plan maintenance establishes a schedule to re-engage stakeholders in the mitigation plan at regular intervals and 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, Logan County intends to follow a regular plan maintenance schedule. The EMA will lead this effort and involve stakeholders, jurisdictions, and the community, laying a solid foundation for the plan update in 2022.

1.5.1 Plan Maintenance Methodology

A significant challenge in conducting annual plan review is the difficulty in holding meetings that are well attended. Many stakeholders perceive these meetings as unnecessary or not critical and do not attend. Government officials, community leaders, and other key stakeholders also have busy schedules and competing demands on their time and must prioritize their attendance at different events. In rural Logan County, most jurisdictions and organizations have only a few employees, if any. In the villages and townships, many elected and appointed officials serve in a part-time or volunteer capacity, and hold full-time jobs elsewhere that occupy their daytime hours. These staffing realities often make conducting community-wide meetings a challenge. Logan County's plan maintenance strategy attempts to address these barriers by incorporating other communication and data-collection methods 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, Logan 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 accessible to most stakeholders. When these options are selected, stakeholders will be asked to dedicate the same attention to the task as they would an in-person meeting. Meetings may be available by multiple means, allowing those who miss face-to-face meetings to contribute digitally or at an alternate time. Records of participation, copies of results, and other communication surrounding these events will be maintained just as it would be for a meeting.

1.5.2 Annual Plan Review

The Hazard Mitigation Planning Team will be called upon to review, evaluate, and discuss the plan annually, on or about the anniversary of the plan approval date. Annual plan maintenance discussions may be conducted through traditional in-person meetings or webinars, electronic surveys, questionnaires, or other forms of communication. The choice of methodology will be at the discretion of the EMA Director based on what best meets the needs of stakeholders and ensures that mitigation strategies are considered on a regular basis. All information-gathering efforts will include evaluation of the past year's disaster incidents and a summary of the resulting damages, costs, and recovery efforts. Status reports on any mitigation projects in process and an update on progress towards achieving the mitigation strategies and actions developed by each jurisdiction will also be included. The EMA will maintain records of these annual discussions.

As part of the annual review process, jurisdictions will be asked to conduct an internal analysis of the mitigation strategies developed by their jurisdiction and submit a short report to the EMA with their findings. The report will include an assessment of any disaster incidents that occurred during the year, a summary of damages and recovery efforts, and a ~~status~~ report on 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 countywide planning team during the annual countywide review process. The EMA will maintain a summary of these reports and findings.

The EMA may choose to convene a planning team meeting after any 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. Mitigation actions should be discussed related to any specific incident that happens. 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 and mitigation strategies will be reviewed for progress and effectiveness. All findings will be recorded and saved for the 2022 update process.

1.5.3 Community Participation

While the EMA is responsible for leading the plan maintenance effort, that process only works if stakeholders are engaged. Ongoing consideration of hazard mitigation strategies is critical to

creating a resilient and sustainable community. It is the EMA's intention that the stakeholders representing the municipalities, jurisdictions, agencies, and organizations involved in plan development will continue to participate in its ongoing review and maintenance. Without their participation, ongoing input will not be comprehensive or accurate. Therefore, all parties involved in developing this plan must understand that the annual review process is critical to the pre- and post-disaster welfare of the county.

Public involvement is an important component of ongoing mitigation planning efforts. To encourage public involvement in plan maintenance, notices of annual plan review activities will be published 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 in accordance with relevant requirements. As with all meetings conducted during plan development, annual update meetings will be open to the public and community 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.

1.5.4 Integration with Community Planning Mechanisms

Local government participation in plan maintenance activities is a major factor in the implementation and achievement of mitigation strategies as well as assessment for new and additional mitigation actions. This participation occurs during intentional mitigation plan review and, more importantly, during daily operations within each jurisdiction that guide the growth and development of specific communities. Most jurisdictions in the county have planning commissions or a committee within the jurisdiction's elected council that addresses growth and development issues within the municipality. These commissions and committees are responsible to the jurisdiction's top elected official, who is then responsible for working with the Logan County officials who hold similar responsibility at the county government level.

An additional function of jurisdiction planning commissions and committees is to provide leadership for new development and business or residential growth in the community that complies with Logan County development goals and standards. These entities determine what growth initiatives are implemented by the municipalities and 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.

At the county level, Logan County's Regional Planning Commission (shared with Union and Champaign Counties) is charged with developing a long-term comprehensive plan to guide the county's growth and development, including the use of land and resources. The Logan-Union-Champaign Regional Planning Commission is an advisory board that approves and guides county development. The planning commission meets monthly and includes representation from the county engineer's office, zoning and code enforcement officials, health department personnel, municipalities, and townships as well as at-large representatives. The three-county

planning commission works with jurisdiction commissions and committees to apply land use guidance across the county. At this time, there is no representation from emergency management on the county's planning commission. As an outcome of the hazard mitigation planning process, the county identified that as a gap in addressing hazard mitigation and is considering how to incorporate that expertise into their work.

The floodplain manager, GIS coordinator and building code officials are all part of the Logan County government. The tax map office is part of the Auditor's Office; the GIS department is part of the Engineer's Office, and the floodplain manager is part of the county's building authority. The county's auditor and engineer and some staff are part of the Regional Planning Commission. Lenders work with the floodplain manager to comply with flood prevention regulations as part of the lending process. Most commercial development is reviewed by the Regional Planning Commission before construction takes place, and as part of the loan process. Properties must be surveyed and confirmed to be or not be located in a flood plain. Since 1996, any property utilizing federal funding to build or renovate must have flood insurance if the property is located in a flood plain, and lenders require mortgaged property to have flood insurance. Currently, the Regional Planning Commission considers mitigation measures during development, but the EMA is the lead county organization charged with support and coordination for mitigation planning and implementation. Logan County officials have included development of EMA involvement in development and comprehensive planning as a mitigation strategy in this plan.

The county will strive to consider hazard mitigation across all other community planning efforts, especially in the comprehensive plan, and intends to include information about hazards, risks, and vulnerabilities in all planning areas. The EMA and Regional Planning Commission will share responsibility to integrate 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 Commission, Floodplain Administrator, Engineer's Office, zoning officials, and public safety officers from across Logan 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.

1.5.5 Documentation of Plan Maintenance

Logan County will consider communication with stakeholders and the public regarding hazard mitigation to be an annual necessity. The EMA will schedule, complete, and record these communications and the results of all meetings to facilitate an expeditious plan update in 2022. It will be the EMA's responsibility to maintain 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.

1.5.6 Plan Update Cycle

Logan County's Hazard Mitigation Plan will expire in 2022. 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 the appropriate timeline is met, formal efforts to update the plan will begin in mid-2020. The EMA Director will ensure that the appropriate and necessary steps are taken to complete this process.