

# **SECTION 3: STATE MITIGATION STRATEGY**

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### 3.1 STATE HAZARD MITIGATION GOALS, OBJECTIVES, & ACTIONS

#### OVERVIEW

Due to the abundance of natural hazards / disasters, Ohio has been active in the hazard mitigation arena for several years. In some ways, Ohio has been a national leader in hazard mitigation for a very long time. Consider the following:

- After the devastating 1913 flood, widely noted as being the largest statewide flood to occur in recorded history, the Ohio Conservancy Act was passed. The law permitted citizens of an area with flood concern to work together to plan, finance and manage a flood control project. As a result, two conservancy districts were created – the Miami Conservancy District in 1915 and Muskingum Watershed Conservancy District in 1933. Both have extensive systems of flood control measures and have resulted in millions of dollars in flood loss reduction.

The Miami Conservancy District (MCD) is perhaps one of the most comprehensive flood management authorities in the nation. Using a combination of planning, structural and non-structural flood mitigation measures, the MCD has helped reduce flood losses for over 1,500 events. MCD Flood control structures are designed to contain runoff that is 40% more than the 1913 flood, which is well over a 1,000 year flood level. Arthur Morgan, the engineer who designed and built the MCD projects went on to be the first Director of the Tennessee Valley Authority in the 1930s.

- In 1971, a report entitled *The Development of Floodplain Management in Ohio* by Battelle Columbus Laboratories, suggested several unique and innovative non-structural approaches to floodplain management. State officials followed-up this report with the first edition of *Ohio Floodplain Regulation Criteria*, which recommended several standards to promote effective floodplain management through land-use codes.
- The State of Ohio has nearly always provided some amount of matching funds for the Hazard Mitigation Grant Program – sometimes matching Federal funds dollar for dollar. State matching contributions to HMGP to date exceed \$34 million dollars.
- The State of Ohio produced an all hazards mitigation planning guide that was the one of the first in the nation in 2002 and preceded FEMA planning guidance by more than one year.
- The State of Ohio was the only recipient in FEMA Region V of 2007 Repetitive Flood Claims funds for two projects.
- Ohio has one of the highest rates of compliance with FEMA's local mitigation planning requirements in the nation.

- Ohio has achieved a 97% NFIP participation rate among Ohio communities with identified flood hazard areas and prioritized compliance with flood protection criteria following disasters.

According to 44 CFR 201.4(c)(3) a SHMP must contain a mitigation strategy that is the state's blueprint for reducing losses identified in the risk assessment. The state's mitigation strategy is described below, and has been updated as part of the 2011 revision. During the update of hazard mitigation goals, objectives, and actions, the Ohio EMA Mitigation Branch:

- Identified applicable mitigation goals, objectives, and actions of the stakeholders that participated in the updating of the plan. This includes direct feedback from the SHMT and other participating entities.
- Identified and reviewed the goals, objectives and actions of the all hazard county mitigation plans that have been developed and approved by FEMA, the handful of community specific mitigation plans that have been developed and approved and any FMA plans that have not been incorporated into local DMA2K plans. These local goals, objectives and action items were compared to those found in the state plan and gave the Ohio EMA Mitigation Branch a clearer vision of what the locals felt was important.
- Identified and reviewed the goals, objectives, and actions of the currently existing State of Ohio Hazard Mitigation Plan.
- Reviewed the state's priority hazards, which include: flooding, tornado/wind, severe summer storms and severe winter storms.

The State of Ohio mitigation strategy in this section of the plan utilizes the following terminology based on FEMA's *State and Local Mitigation Planning How-To Guide*:

- *Goals* – General guidelines that explain what is desired to be achieved. They are usually broad policy-type statements, long term, and represent global visions.
- *Objectives* – Strategies or implementation steps to attain identified goals. Unlike goals, objectives are specific and measurable.
- *Mitigation Actions* – Specific actions to achieve goals and objectives. The mitigation actions are described below and listed in the Mitigation Action Plan Table found in Section 3.2. This table prioritizes mitigation actions, identifies a lead agency for implementation, and is used to track implementation status.

### **PROGRESS ON 2008 GOALS/OBJECTIVES/ACTIONS; CHANGES IN 2011 UPDATE**

The format used to report the goals, objectives, and mitigation actions in the 2011 plan update is consistent with the 2008 plan update. For example, the 2008 plan identified goals by hazard and sometimes by agency. This update

generally identifies goals that are all hazard in nature, with specific objectives related to one or more hazards (with the exception of the goal of mitigating repetitive flood loss structures). A 2008 Mitigation Action Plan Update Summary Table is in the appendices (Appendix E); which provides commentary on the status of the action items identified in the 2008 plan. Finally, the goals/objectives/actions items in this update incorporate priority goals and actions identified in local plans that have been submitted and approved by Ohio EMA and FEMA; incorporate any changes/updates in the strategic plans of agencies that have a role in hazard mitigation; and reflect current trends, issues and priorities.

Overall, more than half of the mitigation actions identified in 2008 were completed. Non-completion of several goals was a result of: 1) large ongoing workload due to disaster declarations, 2) reductions / changes in key staff, 3) state budget issues, and 4) old goals not relevant based on current information or goals not at appropriate level.

One of the goals identified in the 2008 plan update was to enhance the current Ohio EMA Mitigation Branch webpage(s). The Ohio EMA Mitigation Branch secured a PDM grant (matched by State funds) to accomplish this goal. With assistance from a contractor and the Ohio EMA Data Branch, the Mitigation Branch developed the State Hazard Analysis, Resource, and Planning Portal (SHARPP). The SHARPP contains three broad categories of information: mitigation planning information, mitigation project information, and web pages displaying general information on mitigation. The SHARPP can be accessed through the Mitigation Branch website, and will provide the following enhancements to mitigation efforts in Ohio:

- Serve as a web-based repository for past, current, and future versions of State and local natural hazard mitigation plans. Providing easier access to this information will help inform residents about hazard risk and the actions that the state and local communities are planning to undertake that will reduce that risk.
- As local mitigation plans are updated, local officials will enter a summary of their HIRA based on the format used by Ohio EMA. Summarizing local HIRA information in a standardized format will allow the State to more easily analyze vulnerability and potential loss to structures based on local risk assessments.
- Capture key information from past, present, and future mitigation projects in a database that will provide easy search and reporting functions.
- Estimate losses avoided by implementing mitigation projects in Ohio. The estimate will be based on the expected annual benefits for each project generated as part of the required benefit cost analysis for HMA projects.
- The ability to map the location of past mitigation projects in the State utilizing a Google Mapping function. Each point on the map is linked to specific information about that property including before and after photos

of the property and a copy of the deed with the required open space restrictions for acquisition projects. Publicizing open space deed restrictions will help the State and local communities meet FEMA property monitoring and reporting requirements for mitigation projects involving the acquisition of property.

- The Mitigation Branch, ODNR Floodplain Management Program and a FEMA contractor are collaborating on one of the first Risk MAP pilot projects that will utilize the mapping functionality of SHARPP to identify areas of mitigation interest.

The 2011 mitigation strategy update outlined below was developed with input from the Ohio EMA Executive Staff, the State Hazard Mitigation Team, the Silver Jackets team, and various federal, state, and local entities.

**Goal #1: Reduce Loss of Life and Injury from Hazard Events.**

*Goal Discussion.* Ohio is a populous state with over 11 million people. Furthermore, population centers in Ohio are often concentrated in hazard areas – especially floodplains. This is due to their natural progression from communities whose economies were largely water dependent (steel mills needed water for cooling, water was needed for transportation). Events that historically caused loss of life were epidemiological – specifically outbreaks of cholera and influenza killed thousands of Ohioans in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. More recently, hazards that have resulted in significant losses of life include: flooding (467 in Great 1913 flood, 26 in 1990 Shadyside flash flood); fires (322 in 1950 Columbus Penitentiary, 95 in 1963 Marietta nursing home); blizzards/winter storms (51 in 1978 blizzard); and tornadoes (35 in 1974 Xenia tornado).

Less known, but more widespread are injuries from hazard events. In addition to minor or major physical injuries, mental injury (trauma, etc.) is an issue after any type of major hazard event. In addition, both injuries and loss of life are possible not only for direct victims of a hazard event, but also for those responding to / assisting those victims.

If the flood of 1913 occurred today, it is doubtful that there would be as many casualties. This is due to *building and other safety codes*. For example, over 700 communities in Ohio have adopted flood loss reduction regulations to participate in the National Flood Insurance Program. The regulations make buildings more resilient in flood events, which results in improved safety for building occupants. Similarly, building codes today contain standards for wind and fire resistance, and dam/levee construction and rehabilitation standards help prevent catastrophic failures of these structures.

Monitoring and warning systems today are far more sophisticated and effective than their predecessors. The Ohio STORMS (State of Ohio Rain/Snow Monitoring System) effectively monitors precipitation during hazardous weather events. Integrated warning systems (not just a siren on a pole) are effective in flash flood and tornado prone areas; which can also be very effective in reducing potential loss of life and injury.

*New or continuation?* This goal is a continuation from the 2008 update.

**Objective 1: Continue to map hazard areas, refine existing hazard mapping data, and develop/refine loss estimation and vulnerability analysis data.**

Action: Build on the success of the Risk MAP Areas of Mitigation Interest (AOMI) pilot project by continuing to utilize SHARPP to map areas of mitigation interest.

Action: Conduct HAZUS Level 2 flood analyses for all Counties in Region 2 using Ohio Statewide Imagery Program data and corresponding Digital Flood Insurance Rate Map data.

Action: Continue to update and improve the vulnerability analysis for state-owned buildings and critical facilities.

***Objective 2: Promote the use of effective early alert / warning systems.***

Action: Develop guidance on warning system (including NOAA weather radios) funding under the Hazard Mitigation Grant Program 5% initiative.

***Objective 3: Prioritize acquisition of properties, including those in high risk areas (floodways) or those in imminent danger (e.g., landslide) for available funds from FEMA mitigation programs.***

Action: Reduce the number of pre-FIRM, floodprone properties each year by assisting such owners with successful funding of mitigation projects through FEMA mitigation programs.

***Objective 4: Ensure the continuation of an effective dam/levee safety program.***

Action: Inspect all high hazard dams once every 5 years.

Action: Take enforcement actions on violations of state dam/levee safety laws for severely deficient and/or structurally unsound high hazard dams.

Action: Increase the number of Emergency Action Plans through compliance and education efforts.

**Goal #2: Minimize Damage to Property and Societal Disruptions from Hazard Events.**

*Goal Discussion.* Property damage from hazard events is significant in Ohio. Between 1978 and October, 2010, there has been over \$239,198,009.57 in paid claims from the NFIP in Ohio. Although this data is a good indicator – it does not account for all of the property losses due to flood. Only about 30% of flood prone structures have flood insurance, the data doesn't include flood claims available through private insurers (for large facilities like factories – private insurance through a secondary insurer is significant), and the data doesn't include crop losses due to flooding.

Similarly, tornadoes and straight-line winds have high loss potential. The 1974 Xenia tornado event resulted in over \$1 billion in damages in a multi-state region (including Ohio). According to the Insurance Information Institute, New Jersey tops the list of states with the highest average expected losses from tornadoes, followed by Connecticut, Massachusetts, Ohio and Rhode Island, based on A.M. Best's analysis of Risk Management Solutions modeling data. The September 2008 straight-line wind event in Ohio resulted in over \$553.1 million in insured losses, which set a record for the highest amount of insured losses as a result of a single event in Ohio. This event also resulted in over \$52,643,099 in public assistance to communities for infrastructure repair and debris removal. In addition to property losses, societal disruptions occur after a hazard event. Consider the following impacts:

- Infrastructure disruption can result in the cutoff of evacuation routes, pollution due to sanitary facilities not working, lack of clean drinking water, and isolation of populated areas (such as in a road or bridge collapse). Loss of medical facilities, and or public safety facilities, can result in vulnerable populations should a subsequent disaster event occur.
- Direct loss of facilities used by employers, or indirect loss due to infrastructure disruption, can lead to lost wages and lost tax revenues for all levels of government.
- Research has shown that mental health problems, divorce rates, and physical/emotional abuse increase after a significant hazard event.
- Local “gathering places” that are destroyed in a hazard event result in disruption of the social fabric of a community.

Strengthening of laws, regulations, and ordinances for new and existing facilities is not only critical to the protection of property and life but, also, the reduction of massive physical, social, and economic disruption that accompanies disasters. Regulations and ordinances help communities design and construct new facilities or alter existing facilities in a manner that resists the forces of nature and ensures safety. Local land use laws can support this effort by keeping buildings and development out of the most hazardous areas through local land use planning. It is essential that mitigation planning be incorporated into all land use planning activities at the local and state levels.

*New or continuation?* This goal is a continuation from the 2005 and 2008 plan.

***Objective 1: Evaluate and improve safety & loss reduction codes/standards for hazards that affect Ohio.***

Action: Promote the adoption of standards beyond NFIP minimums for flood loss reduction.

Action: Incorporate code and land use related provisions identified in local mitigation plans into local codes and land use plans.

***Objective 2: Develop mitigation resource information for the business community.***

Action: Develop web pages and information focusing on mitigation for businesses.

***Objective 3: Identify funding sources and obtain funds from a variety of Federal, state, regional and local entities to implement mitigation activities.***

Action: Develop a list of potential mitigation funding sources.

***Objective 4: Promote sustainable communities and development.***

**Goal #3: Integrate Hazard Mitigation Policies and Programs.**

*Goal Discussion.* Hazard mitigation, which includes loss reduction, has historically occurred in piecemeal fashion – where a need existed or an opportunity made available, mitigation happened. However, with the requirements to do mitigation planning at the state and local level, mitigation programs have the potential to be more robust and have a need to be integrated. Policies and programs at all levels of government tend to be stove-piped, and it is often up to communities to understand how the programs fit together – many times with little help.

As indicated in the previous goal, incorporating actions identified in local mitigation plans such as suggested code and/or land use changes by actually updating local codes and land use plans is one significant way hazard mitigation policies and programs can be integrated. Another is to promote interagency coordination at the state and national level.

*New or continuation?* This goal is a continuation from the 2008 update.

**Objective 1: Expand the SHMT to include other federal, state and other entities.**

Action: Invite at least two additional entities each year to participate on the SHMT.

**Objective 2: Ohio EMA Mitigation Branch will work with non-traditional partners to better align programs and policies.**

Action: Work with USACE to develop information and policies in situations where communities desire mitigation through the USACE and FEMA.

Action: Continue inter-agency participation on the USACE Silver Jackets Initiative.

**Objective 3: Ensure better coordination of state and local mitigation planning activities.**

Action: Provide training to local county EMA Directors and mitigation plan keepers on entering local plan data into the State Hazard Analysis, Resource, and Planning Portal (SHARPP).

Action: Update Ohio's mitigation planning course offered at Ohio EMA.

**Goal #4: Eliminate Vulnerable Repetitive Loss Flood-Prone Structures in the State of Ohio.**

*Goal Discussion.* Ohio ranks in the top twenty states in the nation in the number of FEMA identified repetitive loss floodprone structures. Furthermore, flooding is Ohio's most costly natural hazard. Although there are various definitions of repetitive loss, these structures represent the most vulnerable and floodprone building stock in Ohio. For such structures, the best and preferred mitigation option is acquisition/demolition. However, it may be possible to use other mitigation techniques (i.e., floodproofing) especially when the structure use is non-residential.

The Ohio EMA Mitigation Branch and ODNR–SOW, Floodplain Management Program continue to be active in this area. The Mitigation Branch utilizes repetitive loss lists published by FEMA to identify repetitive loss structures and target them for outreach regarding FEMA mitigation grant programs that may be available. Between 2006 and 2008 – these lists were utilized for projects under the HMGP, FMA, RFC and SRL programs. For example, there are active, pending or developing FEMA mitigation projects addressing approximately 13 of 45 structures on the FEMA severe repetitive loss list, where net benefits have been identified. Two properties funded under RFC in 2007 and two proposed in 2008 are on the SRL list. In addition, an SRL project funded in 2008 will mitigate one of the most serious of these properties.

The ODNR-SOW, Floodplain Management Program addresses this issue through education and training of local floodplain administrators. The Floodplain Management Program's efforts ensure that the local floodplain administrators are aware of the requirements to conduct "substantial damage" determinations, which require compliance with local flood damage reduction regulations to ensure that vulnerable structures are mitigated during the repair/renovation process. Structures that are substantially damaged/improved, and have flood insurance, may also have access to additional funds available through the property owner's flood insurance policy to make such changes. During the year, substantial damage training is provided in workshops statewide. After significant flood events, the Floodplain Management Program conducts NFIP briefings that focus on a community's responsibility to conduct substantial damage determinations. Finally, the Floodplain Management Program works with the Ohio Building Official's Association to train a volunteer cadre of building officials to conduct substantial damage determination field inspections.

*New or continuation?* This goal is a continuation from the 2008 update.

***Objective 1: Continue to educate Ohio Floodplain Administrators and volunteer cadres such as the Ohio Building Officials Association on the post-event "substantial damage" process.***

Action: Conduct training and/or post-disaster briefings for appropriate audiences on substantial damage assessments.

Action: Finalize the Ohio Building Officials Association substantial damage determination process and incorporate in the State Emergency Operations Plan.

***Objective 2: Educate owners of repetitive loss properties on mitigation techniques and programs that are available.***

Action: Develop and implement an outreach strategy targeting repetitive loss property owners on mitigation techniques and funding programs.

***Objective 3: Prioritize repetitive loss properties for available funds from FEMA mitigation programs.***

Action: Reduce the number of severe repetitive loss properties by 5% each year by assisting such owners with successful funding of mitigation projects through FEMA mitigation programs.

**Goal #5: Promote Research, Education, and Outreach Activities to Create a Culture of Mitigation in Ohio.**

*Goal Discussion.* To take effective mitigation actions, individuals, communities, and the state must have data upon which to make decisions. This data must be based on the best and latest scientific research (ranging from data on the hazard itself to the mitigation actions taken) and must be disseminated effectively.

*New or continuation?* This goal is a continuation from the 2008 update.

**Objective 1: Develop publications and information on all hazards that could potentially impact Ohio.**

Action: Develop success stories in wind resistant construction codes and mitigation techniques.

Action: Develop information on severe winter storm / blizzard / ice mitigation techniques and identify success stories.

Action: Participate in FEMA's Risk MAP outreach initiatives by facilitating local discussions on hazard mitigation.

**Objective 2: Utilize the State Hazard Analysis, Resource, and Planning Portal to promote hazard mitigation.**

Action: Continue to maintain, populate, and enhance the State Hazard Analysis Resource and Planning Portal.

Action: Add a range of mitigation focused web-based training courses to the SHARPP.

**Goal #6: Provide leadership in hazard mitigation.**

*Goal Discussion.* The mission of the Mitigation Branch is to integrate hazard mitigation principles in a variety of ways to make Ohio communities more sustainable and citizens more resilient in the face of future disaster events. The Branch is the leading voice for mitigation in the State of Ohio.

The Branch Chief leads and coordinates activities for the State Hazard Mitigation Team (SHMT). The role of the SHMT is twofold: to facilitate a collaborative discussion of mitigation policies, programs, and procedures in Ohio, and to have a mechanism for efficiently and objectively reviewing project applications for many of FEMA's hazard mitigation programs. Additionally, the Branch is the state entity responsible for implementing FEMA's hazard mitigation programs, and assists Ohio communities in their mitigation planning efforts. State and local governments rely on Mitigation Branch staff technical assistance to develop mitigation plans and projects both before and after a disaster.

The Branch is very active in state and federal associations and workgroups in order to provide hazard mitigation guidance that is aligned with the Branch vision and mission. Such groups include (but are not limited to) the External Stakeholder Workgroup, Central (US) HAZUS Users Workgroup, FEMA's Cooperating Technical Partnership, and the Ohio Floodplain Management Association.

*New or Continuation?* This is a new goal in the 2011 update.

***Objective: Continue to be a leading voice in mitigation nationwide through increased involvement in national and state initiatives, dialogues and workgroups.***

Action: Continue to support efforts to comply with the Emergency Management Accreditation Program (EMAP).

Action: Continue participation on emergency management and floodplain association workgroups.

## 3.2 STATE MITIGATION ACTION PLAN

### OVERVIEW

According to the planning requirements of DMA 2000, a SHMP will contain mitigation actions that are cost-effective, environmentally sound, and technologically feasible. Additionally, such actions are to be prioritized. The mitigation action plan below attempts to provide a concise table of the mitigation actions identified in the previous section, with an assigned priority. Additionally, a lead agency is identified for each action. The “status” and “complete” fields are left blank, as this is a new plan. The mitigation action plan will be reviewed, the table updated, and sent to the SHMT and FEMA annually.

Borrowing a prioritization technique from the State of Kentucky, the mitigation actions have been prioritized in the following way:

**Table 3.2.a**

<b>Priority</b>	<b>Description</b>
<b>A</b>	Projects or activities that permanently eliminate damages or deaths and injuries across the state from any hazard
<b>B</b>	Projects or activities that reduce the probability of damages, deaths, and injuries across the state from any hazard
<b>C</b>	Projects or activities that educate the public on the subjects of hazard mitigation, hazard research, and disaster preparedness
<b>D</b>	Projects or activities that warn the public to approaching natural hazard threats

**2010 MITIGATION ACTION  
PLAN TABLE**  
**Table 3.2.b**

<b>Action</b>	<b>Goal / Objective Reference</b>	<b>Hazard</b>	<b>Lead Agency</b>	<b>Priority</b>	<b>Status</b>	<b>Complete</b>
1. Build on the success of the Risk MAP Areas of Mitigation Interest (AOMI) pilot project by continuing to utilize SHARPP to map areas of mitigation interest.	Goal 1, Obj 1	Flood	Ohio EMA Mitigation Branch	C	New mitigation action.	Ongoing
2. Conduct HAZUS Level 2 flood analyses for all Counties in Region 2 using Ohio Statewide Imagery Program data and corresponding Digital Flood Insurance Rate Map data.	Goal 1, Obj 1	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
3. Continue to update and improve the vulnerability analysis for state-owned buildings and critical facilities.	Goal 1, Obj 1	Multi	Ohio EMA Mitigation Branch		New mitigation action.	Ongoing
4. Develop guidance on warning system (including NOAA weather radios) under the Hazard Mitigation Grant Program 5% initiative.	Goal 1, Obj 2	Flood	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
5. Reduce the number of pre-FIRM, floodprone properties each year by assisting such owners with successful	Goal 1, Obj 3	Flood	Ohio EMA Mitigation Branch	A	Ongoing effort through the administration and implementation of FEMA HMA programs and other	Ongoing

Action	Goal / Objective Reference	Hazard	Lead Agency	Priority	Status	Complete
funding of mitigation projects through FEMA mitigation programs.					mitigation funding sources.	
6. Inspect all Class I-III dams once every 5 years.	Goal 1, Obj 4	Dam Failure	ODNR-DDS	B	The Dam Safety Program has recently expanded the number of dams that will be inspected every 5 years to include Class II-III dams.	Ongoing
7. Take enforcement actions on violations of state dam/levee safety laws for severely deficient and/or structurally unsound high hazard dams.	Goal 1, Obj 4	Dam Failure	ODNR-DDS	B	Notices of Violation are issued for deficiencies identified during inspections. The Dam Safety Program provides technical assistance to remedy deficiencies.	Ongoing
8. Increase the number of Emergency Action Plans through compliance and education efforts.	Goal 1, Obj 4	Dam Failure	ODNR-DDS	B	New mitigation action.	Ongoing
9. Promote the adoption of standards beyond NFIP minimums for flood loss reduction.	Goal 2, Obj 1	Flood	ODNR-DOW, FPM	B	The majority of these initiatives include flood plain regulation, map modification & higher standards workshops.	Ongoing
10. Incorporate code and land use related provisions identified in local mitigation plans into local codes and land use plans.	Goal 2, Obj 1	Multi	County & Local Officials	B	Ongoing.	Ongoing
11. Develop website focusing on mitigation for businesses.	Goal 2, Obj 2	Multi	Ohio EMA Mitigation Branch	C	Will be incorporated into a future update of the State Hazard Analysis, Resource and Planning Portal.	0%

Action	Goal / Objective Reference	Hazard	Lead Agency	Priority	Status	Complete
12. Develop a list of potential mitigation funding sources.	Goal 2, Obj 3	Multi	Ohio EMA Mitigation Branch	B	New mitigation action.	0%
13. Invite at least two additional entities each year to participate on the SHMT.	Goal 3, Obj 1	Multi	SHMT	C	Completed.	100%
14. Work with USACE to develop information and policies in situations where communities desire mitigation through the USACE and FEMA.	Goal 3, Obj 2	Flood	Ohio EMA Mitigation Branch	C	Ongoing. The Silver Jackets initiative is facilitating information sharing and collaboration between the USACE and FEMA.	Ongoing
15. Continue inter-agency participation on the USACE Silver Jackets Initiative.	Goal 3, Obj 2	Flood	SHMT	C	Ongoing program with intended continued participation by FEMA, USACE, NFIP and SHMO.	
16. Provide training to local county EMA Directors and mitigation plan keepers on entering local plan data into the State Hazard Analysis, Resource, and Planning Portal (SHARPP).	Goal 3, Obj 3	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
17. Update Ohio's mitigation planning course offered at Ohio EMA	Goal 3, Obj 3	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
18. Conduct training and/or post-disaster briefings for appropriate audiences on	Goal 4, Obj 1	Flood	ODNR-DOW, FPM	A	Workshops are conducted as needed or requested. Post-event briefings are	100%

Action	Goal / Objective Reference	Hazard	Lead Agency	Priority	Status	Complete
substantial damage assessments					ready for deployment.	
19. Finalize the Ohio Building Officials Association substantial damage determination process and incorporate in the State Emergency Operations Plan.	Goal 4, Obj 1	Multi	Ohio EMA	C	New mitigation action.	0%
20. Develop and implement an outreach strategy targeting repetitive loss property owners on mitigation techniques and funding programs	Goal 4, Obj 2	Flood	Ohio EMA Mitigation Branch	C	Ongoing. Correspondence was sent to Repetitive Loss communities in April 2009	
21. Reduce the number of severe repetitive loss properties by 5% each year by assisting such owners with successful funding of mitigation projects through FEMA mitigation programs	Goal 4, Obj 3	Flood	Ohio EMA Mitigation Branch	A	Ongoing. Correspondence was sent to Repetitive Loss communities in April 2009	
22. Develop success stories in wind resistant construction codes and mitigation techniques.	Goal 5, Obj 1	Tornado	Ohio EMA Mitigation Branch	C	Originally started under DR-1444-OH, this is an ongoing program, however, this action was not funded under DR-1805-OH.	50%
23. Develop information on severe winter storm / blizzard / ice mitigation techniques and identify success stories.	Goal 5, Obj 1	Winter Storm	Ohio EMA Mitigation Branch	C	Information has been developed for severe winter events.	50%
24. Participate in FEMA's Risk MAP Outreach initiatives by facilitating local	Goal 5, Obj 1	Multi	Ohio EMA Mitigation	C	New mitigation action.	0%

Action	Goal / Objective Reference	Hazard	Lead Agency	Priority	Status	Complete
discussions on hazard mitigation			Branch			
25. Continue to maintain, populate, and enhance the State Hazard Analysis Resource and Planning Portal.	Goal 5, Obj 2	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
26. Add a range of mitigation focused web-based training courses to the State Hazard Analysis Resource and Planning Portal (SHARPP).	Goal 5, Obj 2	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
27. Continue to support efforts to comply with the Emergency Management Accreditation Program (EMAP).	Goal 6, Obj 1	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%
28. Continue participation on emergency management and floodplain association workgroups.	Goal 6, Obj 1	Multi	Ohio EMA Mitigation Branch	C	New mitigation action.	0%

### **3.3 STATE CAPABILITY ASSESSMENT**

The 44 CFR 201.4(c)(3)(ii) states the mitigation strategy shall include a description of the State's pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including an evaluation of the State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas.

This section outlines these items. This section includes a discussion of the state's primary laws, regulations, programs, and policies related to hazard mitigation strategy. State agency programs were evaluated via a self-assessment. A brief evaluation of the state's overall approach to development in hazard-prone areas and mitigation funding capability is also included.

Overall, the state's capability to manage hazards and implement hazard mitigation has remained steady.

#### **LAWS AND REGULATIONS**

##### ***Ohio Constitution***

Section 3 of Article XVIII of the Ohio Constitution designates Ohio as a "home rule" state. Home Rule gives municipal jurisdictions the power to govern themselves in local municipal matters independent of state laws. Section 7 of Article XVIII requires that municipalities need to adopt or amend a charter for its government to enact laws. Municipal corporations that do not adopt a charter must follow the procedures provided in state law.

##### ***Ohio Revised Code (ORC) and Ohio Administrative Code (OAC)***

All statutes of a permanent and general nature of the State of Ohio are organized and published in the Ohio Revised Code (ORC). These are the laws passed by the Ohio General Assembly. The Ohio Administrative Code (OAC) is a codification of the rules of the administrative agencies of the state. These rules must be reviewed by the Joint Committee on Agency Rule Review (JCARR). The committee consists of five State Representatives and five State Senators.

The primary function of JCARR is to review proposed new, amended, and rescinded rules. JCARR ensures that: the rules do not exceed the scope of the rule-making agency's statutory authority, the rules do not conflict with a rule of that agency or another rule-making agency, the rules do not conflict with the intent of the legislature in enacting the statute under which the rule is proposed, and the rule-making agency has prepared a complete and accurate rule summary and fiscal analysis of the proposed rule, amendment, or rescission.

A discussion of the primary laws, regulations, and policies that have an impact on mitigation programs within the State of Ohio follows.

### ***Planning, Zoning, and Subdivision Authorities***

Under the Ohio Constitution, the power to plan, zone, subdivide or regulate land use belongs to the General Assembly. Most state authority to plan and regulate land use has been delegated to local government. In recent years some of the delegated power has been taken back to address state wide concerns, especially in the environmental arena (for example the authority to regulate drilling for oil and gas wells used to rest with home rule municipalities but now rests with the ODNR–Division of Mineral Resource Management).

Planning, zoning, and subdivision regulations are not the same. Each is described below.

A plan is a guideline for future growth, usually portraying a long-term period (usually 20-30 years). Planning aides a community in determining where it is, where it wants to be and how to get there. A plan is a guide to reach one or more objectives. In some states, i.e., Florida and New Jersey, plans are enhanced by laws or judicial rulings giving the plans substantial authority.

Comprehensive planning and zoning evolved from the Standard State Zoning Enabling Act (SZEA) of 1922. However, the Act is criticized because it does not define 'comprehensive plan'. Neither municipal zoning enabling authority nor county/township zoning enabling authority in the ORC, Chapter 303 and 519 defines what constitutes a comprehensive or master plan. Ohio statutes do not require a comprehensive planning process prior to the enactment of a zoning ordinance or resolution, although county and township enabling statutes specify the Board of County Commissioners or the Board of Township Trustees may regulate "...in accordance with a comprehensive plan..." If a plan exists, it may support zoning regulations provided it is compiled following significant public participation and is current. In Ohio, state statutes enabling planning are permissive and not mandatory. Failure to plan does not necessarily invalidate zoning regulations.

The elements of a comprehensive plan can vary from community to community. In most cases though, the plan consists of a study of existing conditions and a discussion of future trends, goals, and objectives. Land-use patterns, housing conditions, population, roadways, and other infrastructure are usually the principle elements that are studied. In some cases, educational facilities along with recreation and other government facilities are reviewed. Social service facilities can also be discussed. Comprehensive plans also deal with the land-use related issues relevant to each of these topics.

The relationship between wise land use planning and the reduction of a community's exposure, risk, and vulnerability to hazards is clear. Experience has shown that those communities that carefully plan the location, type, and structural requirements of development to avoid (to the extent possible) hazard areas and vulnerable structures suffer much less disaster-related damage and impact than do communities that don't carefully plan for development. The benefits of wise land use and development planning, from a hazard mitigation standpoint, include:

- less disruption to a community's economic, social, and physical structure;
- less impact on the community's tax base;
- less impact on the provision of essential services; and
- less financial impact in terms of local participation in disaster program cost sharing.

In addition, communities that are more prone to disaster damage may be looked upon less favorably by potential business enterprises as a safe, secure place in which to conduct business. Wise land use planning has very practical benefits for all communities. Two ways to incorporate hazard mitigation planning into comprehensive planning is to: 1) have a hazard mitigation element in the comprehensive plan, or 2) incorporate hazard mitigation concepts, strategies, and policies into existing elements of the comprehensive plan.

Ohio zoning processes are based on the SZEA. The purposes of zoning are to regulate land use, prevent land-use conflict, and allow growth to occur in a rational manner. More specifically, zoning aims to:

- Use land for its most suitable purpose
- Protect or maintain property values
- Promote public health and safety
- Protect the environment
- Manage traffic
- Manage density
- Encourage housing for a variety of lifestyles and economic levels
- Manage aesthetics
- Provide for more orderly development
- Help attract business and industry

Zoning is a regulatory way to implement a community's comprehensive plan. From a hazard mitigation perspective, zoning can be used to regulate land use and development in hazardous areas. For example, many Ohio communities have adopted zoning standards for floodplains and steep slope/landslide prone areas.

The authority to subdivide land is found in ORC Chapter 711. Subdivision regulations are generally adopted to provide for:

- The proper arrangement of streets or highways in relation to existing or planned streets or highways, or to the Official Land Use Plan and Official Thoroughfare Plan,
- The orderly and efficient layout and the appropriate use of the land,

- A common ground of understanding and a sound working relationship between the county and the developer and to safeguard the interests of the homeowner, the subdivider and the county and its citizens,
- The accurate surveying of land, preparing and recording of plats and the equitable handling of all subdivision plats by approving authority and subdividers,
- Technically feasible and economically reasonable standards which achieve a level of subdivision design & construction to minimize damage to property, degradation of natural resources, and to promote and maintain the health, safety and general well-being.

Subdivision regulation can incorporate hazard mitigation principles. For example, subdivision regulations could require flood studies be completed for drainage ways, streams, etc. where no data exists and stormwater management measures for a subdivision could be required to be designed to a 100-year flood event vs. a higher frequency event (such as a 10-year event). Similarly, standards for infrastructure could specify protection against any potential significant hazard.

#### ***Chapter 5502.22 et seq., ORC – State / Local Emergency Management Agencies***

The Chapter provides for a State EMA (which includes the Mitigation Branch), and authorizes countywide (5502.26), regional (5502.27), or local emergency management authorities (5502.271), requiring an emergency management director or coordinator and an Emergency Operations Plan for each county. The law also establishes the legal protection and authority of the EMA to work in times of a disaster. The Ohio EMA is the central point of coordination within the state for response and recovery to disasters.

The Mitigation Branch of the Ohio EMA is responsible for management of FEMA mitigation program activities for the state (except for the ODNR–DOW, which is the state coordinating entity for the NFIP – see below). The Ohio EMA Mitigation Branch administers pre- and post-disaster HMGP, FMA, PDM, SRL and RFC grant programs, including project ranking, implementation, technical assistance, and monitoring. The Mitigation Branch staff coordinates with State agencies to incorporate mitigation techniques into their everyday functions and to provide assistance with project development.

#### ***Title XXXVII Health-Safety-Morals, ORC -Ohio Basic Building Code (OBBC)***

The Board of Building Standards is comprised of 10 members appointed by the Governor, with the advice and consent of the Senate. The board provides uniform standards and requirements for construction and materials to make buildings safe and sanitary for their intended use and occupancy. This refers to any building that may be used as a place of resort, assembly, education, entertainment, lodging, dwelling, trade, manufacture, repair, storage, traffic or occupancy by the public, and all other buildings or parts and appurtenances thereof erected within the state. The Ohio Department of Commerce, Division of

Industrial Compliance ensures compliance with and enforcement of OBBC for industrial facilities.

The Board emphasizes the importance of mitigation techniques. In 1995, the International Basic Building Code was implemented and that date is used as a marker for NFIP determinations. Homes built pre-1995 were not required to meet the same standards as those after the code's inception, and are more hazard-prone. The code includes provisions for several mitigation initiatives, such as flood damage reduction, compliance with established building standards and protection of existing buildings from future hazard events.

#### ***Chapter 1301, ORC - Ohio Fire Code***

The Ohio Fire Code was enacted with the purpose of prescribing rules to safeguard life and property from the hazards of fire and explosion. ORC 3781.03 requires the fire marshal or fire chief of municipal corporations having fire departments or the fire chief of townships having fire departments to enforce all provisions of Chapter 3781, and 3791, of the ORC relating to fire prevention. ORC 1301:7-7-07 consists of issues relating to emergency planning and preparedness. The Fire Code effectively reduces the wildfire hazard through the comprehensive scope of the code, which ranges from training and conducting exit drills, to the development of emergency plans.

#### ***Chapter 1506, ORC - Ohio Coastal Management Act, Ohio Coastal Erosion Management Program***

The ODNR-DOW is the designated lead agency for the development and implementation of the Federal Coastal Zone Management Program. The Coastal Erosion Management Program identifies the coastal erosion areas, enforces rules and regulations for new structures and issues permits for coastal erosion control structures. Coastal erosion is a major concern for cities that border Lake Erie. The permitting and enforcement of the rules and regulation by the ODNR-DOW has been effective in reducing coastal erosion in hazard-prone areas.

#### ***Chapter 1521, ORC - Ohio Dam Safety Program***

The ODNR-DOW is the agency that does inspections and the permitting programs for dams and levees. Legislation outlines the standards for dam and levee construction and ODNR-DOW enforces the dam safety laws. The consequence, if the Dams are not regulated, is flood inundation and potential loss of life. The ODNR-DOW's active enforcement of the laws prevents damage, which is the primary goal of mitigation. The program has been effective; there have not been any significant dam failures since the creation of the program.

***Chapter 1521.13-14; 18 ORC - Ohio Floodplain Management Program***

The ODNR–DOW, Floodplain Management Program coordinates all floodplain management activities for the State of Ohio. The Floodplain Management Program administers the NFIP established in the National Flood Insurance Act of 1968, “82 Stat. 572, 42 U.S.C.A. 4001, as amended and ensures a participating community’s compliance with all requirements.

The Floodplain Management Program in Ohio has been the most effective method of flood reduction and prevention. Regulation of development within the floodplains and compliance after natural disasters lessens the extent of flood damages. The Floodplain Management Program and the Mitigation Branch work closely together to ensure mitigation techniques are being considered.

***Chapter 3733.02, Revised Code - Rules for manufactured home parks, recreational vehicle parks, recreation camps; temporary park-camps***

The public health council of the ODH has the exclusive power to adopt, rules of uniform application throughout the state governing the review of plans, issuance of flood plain management permits, and issuance of licenses for manufactured home parks. This includes the location, layout, density, construction, drainage, sanitation, safety, and operation of those parks; blocking and tie downs of mobile and manufactured homes in those parks; and notices of flood events concerning, and flood protection at, those parks. The rules pertaining to floodplain management are consistent with the floodplain management criteria of the NFIP adopted under the “National Flood Insurance Act of 1968,” 82 Stat. 572, 42 U.S.C.A. 4001, as amended. The actions of the ODH have a major role in the reduction of damage from flood and tornado hazards in manufactured home parks.

***Chapter 6101, ORC - Ohio Conservancy District***

The Chapter outlines the responsibilities for the organization of conservancy districts. The ODNR-DOW has been successful with the conservancy districts, which work to prevent floods, modify stream channels, regulate stream flow and prevent erosion along the Lake Erie Ohio shoreline. Funding for mitigation occurs when a conservancy district assesses property owners.

***Chapter 6131, ORC - Ohio Petition Ditch Enabling Authority***

The provisions in this chapter allow counties to dispose or remove surplus water for controlled drainage, irrigation, the storing of water to regulate stream flow or to prevent the overflow of any land the county and for water conservation. The ODNR-DOW assists counties to enact actions associated with the Ditch Enabling Authority, which effectively reduces flood damage. Funding occurs through assessment of property owners benefiting from specific project.

## STATE AGENCY PROGRAMS & POLICIES

The State of Ohio emphasizes reduction of adverse effects from hazard events and promotes programs to achieve this objective. The State identified the SHMT to assist with mitigation activities in the pre- and post-disaster phases. Staff from the Mitigation Section of the Ohio EMA works with the SHMT and state agencies to guide mitigation activities based on the specific event, establish goals, objectives and strategies for the development and implementation of a comprehensive state mitigation program and to evaluate policies and state-funded or administered programs that benefit mitigation activities. This section provides a better understanding of the resources available through State Agencies Pre- and Post-Disaster as related to hazard mitigation.

Ohio EMA utilized a revised form from FEMA 386-3 (part of the mitigations planning series) to assist in the determination of specific mitigation capabilities of Ohio's Departments and Agencies. The assessment surveys were sent to all participating State agencies in 2005. Minor changes have taken place since that time, and the 2008 update has updated data where appropriate. In addition, there is a format change to eliminate a named POC.

The following section incorporates the information for each agency into charts. The matrix allowed the agencies to identify the most significant state funded or state administered programs, policies, regulations or practices relating to hazard mitigation or loss reduction. The agencies were then evaluated to determine if their programs supported, facilitated or hindered mitigation objectives, which is listed in the Comments column of each agency's mitigation summary. None of the agencies responded with programs, policies or regulations that would hinder the mitigation process.

### Definitions:

- Support loss reduction – Programs, plans, policies, regulations, funding or practices that help implement mitigation measures.
- Facilitate loss reduction – Programs, plans, policies, etc. that make implementing mitigation measures easier.
- Hinder loss reduction – Programs, plans, policies, etc., that pose obstacles to implementing mitigation measures.

Several state agencies promote programs that encompass pre- and post-disaster mitigation activities. Hazards are unpredictable, but there are programs that present an opportunity to mitigate the hazard's destruction before an event occurs. Utilization of mitigation programs prior to a disaster could prevent the damage from occurring or work to lessen the recovery time and expenditures caused by the natural hazard. Post-disaster the State relies on its agencies to assist with the recovery process. A State requests a Presidential Declaration when the scope of recovery from an event is beyond the State's capability. A Presidential Declaration provides numerous resources, which are incorporated into the State agency functions, for assistance in the response and recovery from a disaster.

*Office of Budget and Management (OBM)*

The Ohio OBM is a cabinet-level agency within the executive branch of the Ohio State government. The director of OBM sits on the Governor's cabinet as the Governor's chief financial officer. The primary mission of OBM is to provide fiscal accounting and budgeting services to state government. These services include the coordination, development, and monitoring of agency operating and capital budgets and the review, processing, and reporting of financial transactions made by state agencies. OBM also assists the Governor and other state agencies by providing policy and management support relative to the state's fiscal activities.

**Table 3.3.a  
Office of Budget and Management Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Allocation of Project Funds (Pre- and Post-Disaster)	X			The Controlling Board of the OMB supports mitigation activities by allocating the funds to complete the State's cost share match for the grant programs. Ohio EMA worked diligently during the 1997 flood event, with the State Controlling Board to identify a 100% match to the federal HMGP, and PDM allocations. The State's ability to match dollar for dollar continued through disaster declarations of March 2003. More recently, the States fiscal stability has prevented the State from providing a 100% match to federal funds.

*Ohio Department of Administrative Services Office of Risk Management (ORM)*

The ORM is responsible for the placement of property and casualty insurance for state agencies, the state's bonding program and administration of the self-insured vehicle liability program. The ORM facilitates the mitigation process by providing information and services that are useful tools for planning initiatives.

**Table 3.3.b****Ohio Department of Administrative Services – Office of Risk Management  
Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Statewide Catastrophic Property Insurance Program (Pre-Disaster)		X		All state-owned buildings are insured under one single policy. The policy is underwritten on an all risk basis. Loss control and safety inspections identify specific hazards and allow the state agency the opportunity to correct and mitigate hazards prior to loss.
Comprehensive Risk Management Plan (Pre-Disaster)		X		Protects the state's assets as well as streamlines current insurance policies, procedures and claims services. The plan facilitates the mitigation process by providing information, which is a useful planning tool for local planning initiatives.
Ohio Administrative Knowledge System (OAKS), Enterprise Resource Planning (Pre-Disaster)		X		DAS is a sponsoring Agency of the OAKS enterprise computer project. As part of the asset management system, all state-owned buildings and land will be listed in the database, which will provide important planning information to the State and local jurisdictions.
Property Insurance Building Inventory (Pre-Disaster)	X			DAS maintains a building inventory of all state-owned buildings insured under this program, which assists the State in locating specific assets and identifying potential hazards and prevention.

*Ohio Department of Commerce (ODC)*

The ODC regulates and provides services to Ohio industries. Its mission is to protect the safety and welfare of Ohio’s citizens while fostering a business friendly environment. The ODC regulates much of the construction industry and is involved in many industrial compliance issues in the state. It charters banks, credit unions and savings and loans/savings banks and licenses real estate brokers, auctioneers and security guards. The seven divisions of the ODC include Financial Institutions, Consumer Finance, Industrial Compliance, Real Estate, Securities, State Fire Marshal, and Unclaimed Funds.

**Table 3.3c  
Ohio Department of Commerce Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Ohio Basic Building Code Flood Regulations (Pre- and Post-Disaster)	X			The Industrial Compliance, Board of Building Standards administers the OBBC, which incorporates provisions of the BOCA. BOCA is a model code governing building regulations for the protection of public health, safety and welfare. The Code includes mitigation methods for hazard reduction. Flood hazard mitigation is accounted for in Section 2102.0 “Flood Resistant Construction” of the OBBC. If local authorities determine a building or structure requires flood resistant construction, they must comply with the OBBC.
Site, Building and Community Profiles (Pre- and Post-Disaster)		X		Provides a catalog of businesses and industrial sites in Ohio, and assists the State and local jurisdictions with identification of hazardous material locations as part of the planning process.
Education and Outreach (Pre- and Post-Disaster)		X		The office of the State Fire Marshal provides information on Fire Prevention as well as Severe Weather Awareness

*Ohio Department of Development (ODOD)*

The Mission of the ODOD is to attract, retain and create business in Ohio. The ODOD has created 12 regional economic development offices to enhance the overall business climate by providing outreach assistance to local governments, business, professional economic development agencies and the public. They serve as the focal point for problem solving and as advocates for specific regions of Ohio. The ODOD, Community Development Division, Office of Housing and Community Partnerships are most active in mitigation by assisting local communities with mitigation projects through CDBG and CHIP.

The Department is a cabinet level agency that oversees a full portfolio of programs including: small business growth, technology commercialization, exports promotion, travel promotion, energy efficiency, affordable housing, community infrastructure, downtown revitalization and brownfield clean-up.

**Table 3.3.d  
Ohio Department of Development Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Community Development Block Grants (CDBG) (Pre- and Post-Disaster)		X		The funds can assist with the rebuilding process that occurs after disasters. Local communities utilize CDBG funds as part of the match for HMGP projects. The program is an effective mitigation initiative since it reduces or eliminates flood damage by elevating, acquiring or retrofitting repetitively flooded structures.
Community Housing Improvement Program (CHIP) (Pre- and Post-Disaster)		X		Provides grants to eligible communities interested in undertaking housing-related activities, including necessary infrastructure improvements. The program promotes mitigation objectives as part of the building process and can be used as the match for HMGP projects.

*Ohio Department of Health (ODH)*

The ODH strives to protect and improve the health of all Ohioans, through partnerships with 143 local health departments and members of the medical health communities, by preventing disease, promoting good health and assuring access to quality health care.

**Table 3.3.e****Ohio Department of Health Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Regulation of Manufactured Home Parks (Pre- and Post-Disaster)	X			ODH has exclusive regulatory authority over plan approval of manufactured home parks and has entered into a Cooperative Agreement with ODNR and Ohio EMA in an effort to further flood hazard reduction. ODH requires individual pad heights to be elevated as much as two feet above the 100-year elevation. Park owners and operators are required to report flood events and conduct substantial damages determinations.
Private Water Supply System Standards	X			ODH does not allow private water supply systems to be located in FEMA identified 100-year floodplain areas.
Protection from Bio-terrorism and Other Disasters (Pre-Disaster)	X			ODH utilizes new technology and scientific and medical discoveries to meet the ever growing, ever changing needs of the communities. In addition to research, ODH teams with public safety and the public health and medical partners to ensure that Ohio is prepared and is protected from bio-terrorism, as well as other disasters. ODH also offers grants relating to a variety of public health programs to organizations in Ohio, including county and local health departments.

*Ohio Department of Insurance (ODI)*

Agency Mission/Function

The mission of the ODI is to protect the interests of the public through consistent and fair application of Ohio’s Insurance Laws and Regulations and to inform and educate the public on insurance issues. The Department encompasses many offices including: the Office of Consumer Advocate; Consumer Services Division; Office of Investigative and Licensing Services; Market Conduct Division; Licensing Division; Office of Legal Services; Office of Property and Casualty Services; Office of Life and Health and Managed Care Services; Managed Care Division; and the Office of Financial Regulation Services.

**Table 3.3.f  
Ohio Department of Insurance Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Education and Outreach (Pre- and Post-Disaster)	X			The ODI supports loss reduction through educational outreach provided to Insurance Agencies, pre- and post-disaster. The information includes mitigation options to reduce damage from hazardous events. The agencies are responsible for providing the information to their policyholders, since any pre-disaster mitigation actions or mitigation during the repair process will reduce or eliminate the number of policy claims filed after future hazard events.

*Ohio Department of Natural Resources (ODNR)*

A department of incredible diversity, ODNR owns and manages more than 590,000 acres of land, including 74 state parks, 20 state forests, 127 state nature preserves, and 120 wildlife areas. The department also has jurisdiction over more than 120,000 acres of inland waters; 7,000 miles of streams; 481 miles of the Ohio River; and 2-1/4 million acres of Lake Erie.

ODNR licenses all hunting, fishing, and watercraft in the state and is responsible for overseeing and permitting all mineral extraction, monitoring dam safety, managing water resources, coordinating the activity of Ohio's 88 county soil and water conservation districts, mapping the state's major geologic structures and mineral resources, and promoting recycling and litter prevention through grant programs in local communities. As an umbrella organization for such diverse interests, the department pulls all these activities into four fundamental mission components:

- Resource management by sustained productivity of Ohio's renewable natural resources, promoting the wise use of non-renewable natural resources, and protecting Ohio's invaluable threatened and endangered natural resources.
- Economic development through job creation/expansion/retention, stimulating local economies, developing industry and tourism opportunities, and supporting the present and future economic health of the state.
- Recreation by providing leisure services and recreation opportunities for the public at all levels.
- Health and safety through fair and consistent law enforcement participating in regulatory matters and identifying and responding to environmental hazards.

**Table 3.3.g**  
**Ohio Department of Natural Resources Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Ohio Floodplain Management Program ORC 1521.13-14;.18 (Pre- and Post-Disaster)	X			<p>ODNR-DOW coordinates with the NFIP; monitors compliance with state and local floodplain management standards; provides assistance in mitigation planning; and identifies flood hazards.</p> <p>Assists Ohio communities with adopting flood loss reduction standards that meet NFIP minimums and assists communities interested in adopting standards beyond NFIP minimums.</p> <p>Coordinates the FEMA Map Modernization Program. This program will modernize the flood mapping program and outline the steps necessary to update and digitally format FEMA's flood maps for the nation and streamline public awareness of the importance of the maps. The updated maps outline flood hazard areas, which helps with the implementation of mitigation actions by easily identifying if structures are within floodplains during eligibility determinations for acquisition projects.</p>
Urban Stormwater Program, Watershed Programs (Pre- and Post Disaster)		X		<p>ODNR, Division of Soil and Water Conservation develops model regulations for urban stormwater management; provides assistance with stream morphology assessments; funds/administers Ohio Watershed Coordinator Program.</p>
Ohio Coastal Management Act, Ohio Coastal Erosion Management Program ORC 1506. (Pre- and Post-Disaster)	X			<p>ODNR, Office of Coastal Management identifies coastal erosion areas, enforces rules regulating new structures in coastal erosion areas, and issues permits for coastal erosion control structures. Provides Coastal Management Assistance Grants and Erosion Control Loans.</p>
Ohio Dam Safety Program ORC 1521 (Pre- and Post-Disaster)	X			<p>ODNR-DOW DS has inspection and permitting permits programs for dam and levees, classifies hazards and develops standards for dams and</p>

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
				levees. They have authority for emergency drawdown of water. Provides funds for the Dam Repair Loan Fund.
Ohio Conservancy District ORC 6101 (Pre-Disaster)		X		ODNR-DOW enables organization of conservancy districts for the purposes of preventing floods, modifying stream channels, and regulating flow of streams and erosion along the shoreline of Lake Erie. Mitigation funding occurs when a conservancy district assesses property owners.
Ohio Petition Ditch enabling authority ORC 6131 (Pre- and Post-Disaster)		X		ODNR-DOW allows counties to dispose or remove surplus water, for controlled drainage of any land, for irrigation, and storage of water to regulate stream flow or to prevent the overflow of any land in the county.
Abandoned Mined Lands Program (Pre-Disaster)	X			ODNR, Division of Mineral Resources Management administers mine lands programs to reclaim those area disturbed by coal mining operations. Types of problems addressed include: mine openings, landslides, highwalls, erosion and subsidence.
Ohio Mine Subsidence Insurance (Pre-Disaster)	X			Ohio Fair Plan, Mine Subsidence Insurance Underwriting Association pays insurance claims as a result of mine subsidence. The insurance is mandatory as part of homeowners insurance in 26 Ohio counties and optional for 11 counties.
Ohio Seismic Network (Pre-Disaster)		X		ODNR, Division of Geological Survey is a cooperative effort consisting of 23 seismic stations coordinated by the Division and managed from the Ohio Earthquake Information Center. The stations provide historical and current information to Ohio.
Firewise Program (Pre-Disaster)		X		ODNR, Division of Forestry heads a multi-organizational initiative designed to include fire safety professionals, homeowners, and community leaders in localizing efforts to lessen the risk of wildfires. The goal is to reduce susceptibility to wildfires through a cooperative effort.

*Ohio Department of Transportation (ODOT)*

The ODOT’s mission is to provide a world-class transportation system that links Ohio to a global economy, while preserving the state’s unique character and enhancing its quality of life. The TRAC, created by the Ohio General Assembly in 1997 to bring an open, fair, numbers-driven system to choosing major new transportation projects, is composed of the director of ODOT and eight appointees. The director of ODOT certifies the amount of money available for major, new capacity projects to the TRAC after funds for system preservation are determined. Historically, the TRAC has had about \$300 million a year to pay for projects, including design, right of way, and construction. The ODOT considers mitigation objectives as part of their project development.

**Table 3.3.h  
Department of Transportation Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Engineering and Design Practices (Pre- and Post-Disaster)	X			Ensures that land use and re-use laws and regulations are adhered to, which reduces loss from future events.
Disaster Recovery and Repair (Post-Disaster)		X		Clear and repair roadways interrupted by flooding, tornados and landslides. Promotes and utilizes mitigation measures throughout engineering and design process to prevent future damage. Performs small-scale bank stabilization.
Transportation Review Advisory Council (TRAC) (Pre- and Post-Disaster)	X			Established by ORC in 1997 at ODOT's request, the TRAC is a permanent body of predominantly non-ODOT personnel that develops and modifies the Major New Project Selection process and approves major new capacity by adding projects for funding. Mitigation objectives are taken into consideration as part of the process.
Education and Outreach (Pre- and Post-Disaster)	X			The DOT provides information to citizens on safety and prevention techniques and promotes severe weather awareness.

*Ohio Emergency Management Agency (Ohio EMA)*

Established under Chapter 5502 of the ORC, the Ohio EMA is the central point of coordination within the state for all hazard preparedness, response, recovery and mitigation. Ohio EMA coordinates all situation and damage assessment operations in a disaster area. The agency routinely cooperates with federal, state, and local governments to maintain and develop disaster preparedness, response, recovery, and mitigation plans. Ohio EMA establishes and maintains a state Emergency Operations Center (EOC) to provide coordination and public information during emergencies and disasters. It is the State Coordinating Agency responsible for the administration of federal disaster assistance programs under The Robert T. Stafford Act, Public Law 93-288, which requires mitigation recommendations and implementation as a condition of federal financial assistance.

The primary focus of the agency, when not in a response or recovery mode, is to ensure that the state, and the 11 million citizens residing in it, is prepared to respond to an emergency or disaster and to lead mitigation efforts against the effects of future disasters. It is critical that Ohio EMA's staff interfaces regularly with their local and federal counterparts to ensure preparedness and the capability to respond at all levels.

**Table 3.3.i  
Ohio Emergency Management Agency Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Manages the State Hazard Mitigation Program (Pre- and Post-Disaster)	X			The mitigation staff's purpose is to promote mitigation statewide and to manage the FEMA mitigation programs for Ohio.
Hazard Mitigation Grant Program (HMGP) (Post-Disaster)	X			Ohio EMA Mitigation Branch administers this program, which is available after a Presidential Disaster Declaration. HMGP funds hazard mitigation plans and cost-effective projects that reduce or eliminate the effects of hazards and/or vulnerability to future disaster damage. Typically, the state provides a portion of the required non-federal match.
Pre-Disaster Mitigation Grant Program (PDM - Pre-Disaster)	X			Ohio EMA Mitigation Branch administers funds from this annual, nationally competitive program. PDM funds hazard mitigation plans and cost-effective projects that reduce or eliminate the effects of hazards and/or vulnerability to future disaster damage.
Flood Mitigation Assistance Program (FMA – Pre - Disaster)	X			Ohio EMA Mitigation Branch administers this program, which funds flood mitigation plans, provides technical assistance, and funds construction projects that reduce flood risk to insured, repetitive loss properties.
Repetitive Flood Claims Program (RFC – Pre-Disaster)	X			Ohio EMA Mitigation Branch administers this program, which funds construction projects that reduce flood risk to insured, repetitive loss properties.
Severe Repetitive Loss Program (SRL – Pre-Disaster)	X			Ohio EMA Mitigation Branch administers this program, which funds construction projects that reduce flood risk to insured, severe repetitive loss properties.
NFIP good standing requirement for mitigation project funding (Pre- and Post- Disaster)	X			Ohio EMA Mitigation Branch requires good standing in the NFIP and no outstanding CAV issues as a prerequisite to mitigation funding. Ohio EMA coordinates with ODNR (who administer the program) to promote floodplain management and reduction through NFIP participation.
Mitigation Post-Disaster PDA (Post-Disaster)	X			Mitigation Staff accompanies PDA teams to evaluate the disaster in its

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
				early stages and determine which communities could benefit from mitigation actions. It also presents an opportunity to highlight potential success stories.
Education and Outreach (Pre- and Post-Disaster)	X			Mitigation Staff conducts education and outreach activities focused on promoting pre- and post-disaster mitigation techniques, developing effective mitigation projects, benefit-cost analysis, mitigation planning, and other mitigation related topics.
Ongoing Technical Assistance (TA)		X		If a community requests technical assistance at any time, the Mitigation Branch will facilitate the request, if possible.
Hazards United States (HAZUS) (Pre-Disaster)		X		The Mitigation staff encourages and facilitates local and state use of HAZUS to support mitigation planning and development of mitigation strategies for areas at risk to earthquake and flood.
Mitigation Planning Coordination (Pre-and Post-Disaster)		X		Mitigation Planner assists with the update of the SHMP, as well as facilitates and reviews local plans that are developed. Assists communities with integrating local mitigation plans into other plans/functions; assists with plan implementation.
Public Assistance	X			Ohio EMA Disaster Recovery Branch (DRB) administers Stafford Act recovery programs including Public Assistance (PA). The PA program provides mitigation funding for certain public facilities that are damaged in a declared disaster event and PA funds are also available to mitigate these facilities (Section 406 mitigation). The Recovery Branch is responsible for this program and Mitigation Branch assists when needed.

### Ohio Environmental Protection Agency (OEPA)

The OEPA is a trusted leader and environmental steward using innovation, quality service, and public involvement to ensure a safe and healthy environment for all Ohioans. Their mission is to protect the environment and public health by ensuring compliance with environmental laws and demonstrating leadership in environmental stewardship. OEPA has played a prominent role in many of the state's environmental success stories. They have a nationally acclaimed water monitoring program, one of the country's most extensive air monitoring networks, a groundbreaking agreement with the federal government to oversee clean-ups at federal sites and an innovative funding program to protect and restore water resources.

**Table 3.3.j**

### Ohio Environmental Protection Agency Mitigation Summary

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Regulation of Waste Streams (Pre- and Post-Disaster)	X			Defines regulated waste streams; outlines requirements for proper management and disposal. Includes flood reduction criteria.
Public Outreach Materials (Pre- and Post-Disaster)	X			Provide clarification of regulatory requirements, including flood reduction criteria.
Debris Management Course (Pre- and Post-Disaster)		X		Co-presented with Ohio EMA; provides guidance/training for anyone involved in disaster preparedness and response/recovery activities. Provides and opportunity to outline mitigation goals and objectives for flood reduction.
Technical Assistance (Pre- and Post-Disaster)		X		Provide guidance to local officials regarding regulatory requirements for managing and disposing of various waste streams without making them hazard-prone.
Project Development (Pre-Disaster)	X			Provide clearance for any mitigation project actions that would alter the natural environment as part of the development process.
Water Pollution Control Loan Fund (WPCLF)		X		Provides funding for wastewater treatment facility improvements. Funded WWTPs must ensure that upgrades and facility are protected to 500-year flood or 2 feet above 100-year flood.

*Ohio Historic Society (OHS)*

The Mission of the OHS is to preserve and encourage the study of our heritage and to inspire the efforts of others to that end. They provide leadership in preserving and interpreting evidence of the past and work to further knowledge, understanding and appreciation of all aspects of history related to Ohio and its cultural and natural environment. The OHPO, an office under OHS, is the most active in mitigation as it ensures compliance with the National Historic Preservation Act of 1968, as amended.

**Table 3.3.k**

**Ohio Historic Preservation Office Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
National Historic Preservation Act (Pre- and Post-Disaster)	X			OHPO, ensures all historic and archeological laws and statutes are addressed and adhered to.
Project Application Review Process (Pre-Disaster)	X			OHPO, ensures the archeological integrity of lands and structures are addressed and reviewed for environmental applicability during project ranking process.
Provide Technical Assistance and Training (Pre-Disaster)		X		If the structure is protected under the National Historic Preservation Act, the OHS works with the homeowner and State to provide a mitigation solution for preservation without compromising the integrity of the structure.

*Ohio Public Works Commission (OPWC)*

The OPWC was created to assist in financing local public infrastructure improvements. These programs provide financial assistance to local communities for the improvement of their basic infrastructure systems. The SCIP, created in 1987, by an amendment to the Ohio Constitution creating Section 2K, Article VIII of the Ohio Constitution, which allows the state to use its general revenues as debt support and issues up to \$120 million in bonds each year. State bond proceeds are distributed to each of the commission's nineteen District Public Works Integrating Committees. Aid is limited to roads, bridges, water and sanitary sewer projects concerning storm water and solid waste. This program was re-authorized in 1995 by the addition of Section 2M, Article VIII of the Ohio Constitution.

**Table 3.3.I  
Ohio Public Works Commission Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Infrastructure Financing (Pre- and Post-Disaster)	X			Provides funding to assist Ohio jurisdictions in repairing/replacing public infrastructure, including emergency projects. Mitigation objectives are incorporated into project development.
Clean Ohio Fund (Pre-Disaster)	X			Approved in 2001, the \$400 million dollar bond program that provides funds to preserve natural areas and farmland, protect streams, creates outdoor recreational opportunities, and revitalizes urban areas by returning contaminated properties to productive use. At this time (May 2008), the fund has expended all appropriations; Governor Strickland has proposed an additional \$400 million as part of a larger jobs package.

*Ohio Manufactured Homes Commission (OMHC)*

The State of Ohio has adopted laws and rules that regulate the installation of manufactured homes and the installation of foundations (base support systems) for manufactured homes. The OMHC has exclusive authority over the installation of manufactured homes not located in licensed manufactured home parks. The Ohio Manufactured Homes Commission (Commission) is charged with enforcing these laws pursuant to ORC Chapter 4781

**Table 3.3.m****Ohio Manufactured Homes Commission Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Site / Plan Review		X		Requires flood hazard data and lowest floor data for proposed home installations in special flood hazard areas.
Inspections		X		Requires inspection of all manufactured home installations, including those in special flood hazard areas.

*Public Utilities Commission of Ohio (PUCO)*

The PUCO was created to assure Ohioans adequate, safe and reliable public utility services at a fair price. Monitoring and enforcing PUCO rules and state laws against unfair, inadequate and unsafe public utility and transportation services achieve this. More recently, the PUCO gained responsibility for facilitating competitive utility choices for Ohio consumers. The PUCO regulates providers of multiple utility services including electric and natural gas companies, local and long distance telephone companies, water and wastewater companies, and rail and trucking companies.

**Table 3.3.n****Public Utilities Commission Mitigation Summary**

Programs, Plans, Policies, Regulations, Funding or Practices	Effect on Loss Reduction (X)			Comments
	Support	Facilitate	Hinder	
Technical Assistance for Program Development (Pre-Disaster)	X			The PUCO supports mitigation measures and provides imperative information to Ohio EMA, during project development, regarding the safety of property before demolition of homes, including the locations of buried power lines.
Identify Projects Post-Disaster (Post-Disaster)	X			Work with utility companies post-disaster to identify projects and utilize 406 mitigation funds through the PA program, if possible.

## **STATE DEVELOPMENT POLICIES FOR HAZARD-PRONE AREAS**

State development policies for hazard areas are generally manifested through the programs identified in the previous section. As a home rule state, Ohio does not have comprehensive or overarching standards for development in hazard-prone areas. At the same time, Ohio communities have significant freedom to adopt and enforce policies for these areas. For example, any Ohio community could adopt zoning standards that apply to hazard-prone areas because such standards have a direct tie to public health and safety. As was stated earlier, Ohio does not have a requirement for comprehensive planning nor hazards planning other than the requirements found in the Disaster Mitigation Act of 2000.

Most Ohio policies are targeted and limited to the hazard of flooding or coastal erosion. A few examples follow:

- Under Section 1521 of the Ohio Revised Code (ORC), development in 100-year floodplains that is funded by state and state-administered federal monies must comply with the minimum National Flood Insurance Program (NFIP) criteria.
- Infectious waste treatment facilities permitted under Section 3734 of the ORC are prohibited in all special flood hazard areas.
- The Ohio Basic Building Code and the Ohio Fire Code are now based on the International Code Council codes. The OBBC contains minimum standards for flood resistant construction.

The Ohio EMA has prioritized hazard mitigation planning and the use of acquisition of hazard-prone structures as a mitigation action for many years and such a priority will continue.

## **STATE FUNDING CAPABILITY FOR HAZARD MITIGATION**

As of this update, Ohio, like many states, is feeling the results of a difficult economic climate. Tax revenues are down and there are increasing demands on both state and local resources. Still, Ohio has been aggressive in pursuing hazard mitigation projects available through FEMA programs. Appendix F: FEMA Mitigation Programs Funding Summary shows that since 1990, the date of the first Federal disaster declaration, which resulted in mitigation funding, over \$36 million of state funds have been spent on FEMA's hazard mitigation programs (this does not include state match assistance for 406 mitigation accomplished through the Public Assistance program). Typically, the State of Ohio provides a cost share for the HMGP that varies from disaster to disaster. Ohio has provided anywhere from matching Federal mitigation funds dollar-for-dollar, to providing a portion of the non-Federal matching funds required to only providing funds to match the state management costs of the program. It has generally been a policy of the state, even when Federal mitigation funds were matched dollar-for-dollar, that there be some amount of local match contributed so a community would have some vested interest in the project.

However, Ohio is not only committed to hazard mitigation through providing funds for FEMA mitigation programs, Ohio also has committed to building / maintaining state staffing to provide a good measure of technical assistance to Ohio communities and citizens in both the state Floodplain Management Program, Dam Safety Program and Mitigation Branch. However, these programs as well as others in state government are not immune to budgetary challenges.

Clearly, the State of Ohio is committed to hazard mitigation.

### **3.4 FEMA MITIGATION PROGRAM IMPLEMENTATION CAPABILITY ASSESSMENT**

Since hazard mitigation is a Federal-state-local partnership, states have a responsibility for maintaining competency in the ability to manage and implement a robust state hazard mitigation program. Hopefully, this program would not only effectively administer FEMA mitigation programs, but would also assist in the administration or promotion of other mitigation programs that are offered by different entities. For example, many local mitigation plans identify structural flood control as a possible mitigation measure. A competent state mitigation program at the state would not only be aware of possible USACE programs that could be utilized, but could facilitate getting the project underway.

Overall, Ohio has been a leader in implementing FEMA mitigation programs for many years. In addition to participating in every FEMA mitigation initiative that has ever been proposed, Ohio achieved the *managing state* status, which provided Ohio more autonomy over the management of these programs. Unfortunately, this status has been discontinued by FEMA because of new statutory language in DMA 2000 for which FEMA has not yet written implementation rules. This new statutory language would allow FEMA mitigation programs to be delegated to the state.

State mitigation planning criteria under the Stafford Act focuses on competency delivering FEMA mitigation programs. The following sections describe the Ohio EMA Mitigation Branch's capability in this regard. This section does not currently include evaluation of the state's other hazard mitigation programs that are at least partially supported by FEMA – the Floodplain Management Program and Dam Safety Program.

#### **PROJECT IMPLEMENTATION CAPABILITY**

The 44 CFR 201.5(b)(2) (i) and (ii) states that an enhanced SHMP must document the state's project implementation capability, identifying and demonstrating the ability to implement the plan, including:

- Established eligibility criteria for multi-hazard mitigation measures;
- a system to determine the cost effectiveness of mitigation measures, consistent with OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs; and
- a system to rank the measures according to the state's eligibility criteria (*Evaluation criteria*).

For the purposes of this section, *eligibility criteria* are those that either allow or disallow a mitigation project to be considered further. *Evaluation criteria* are those that allow for a comparison different mitigation projects.

## Eligibility Criteria for Hazard Mitigation Measures

Generally, the State of Ohio does not establish eligibility criteria for hazard mitigation measures that exceed those found in the Code of Federal Regulations (CFR) or specific program guidance. The main exception to this is under HMGP. In fact, Ohio in many instances, advocates for inclusion of measures where guidance is vague.

### HMGP

The CFR identifies several eligibility requirements for projects under HMGP (these criteria, with usually only slight modifications are applicable to the other four FEMA mitigation programs as well):

1. Applicants can only be state and local governments or certain non-profit entities (Ohio does not have any Federally recognized Indian tribes).
2. State and local mitigation plan must have approved mitigation plans in place.
3. Projects must be consistent with state and local mitigation plans.
4. Projects must have a beneficial impact on the disaster area.
5. Projects must be in conformance with Federal environmental regulations, including 44 CFR Part 9, Floodplain Management and Protection of Wetlands and 44 CFR Part 10, Environmental Considerations.
6. Projects must solve a problem independently or constitute a functional portion of a solution, where there is assurance that the project as a whole will be completed.
7. Project must be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster (see *Cost-Effectiveness of Mitigation Measures section below*).
8. Project must be an eligible activity. Under HMGP, an eligible activity could be one that is an eligible project type – a mitigation planning project, a 5% special initiative project, or a routine “sticks and bricks” mitigation project (acquisition, elevation, retrofitting, safe room, etc.).
9. Applicant must commit to required non-Federal cost share.

In Ohio, competition for HMGP funds is tremendous. On average, project applications will exceed available funding by 3-10 times. As a result, both eligibility criteria and evaluation criteria have been developed to fairly distribute these post-disaster funds. These criteria, and modifications needed if necessary, are found in the Administrative Plan (see Appendix I) and Mitigation Strategy for the event.

**PDM, FMA, RFC, SRL**

The statute, CFR, and specific program guidance identifies eligibility criteria for these programs that are different from the ones described for HMGP. Ohio follows these eligibility criteria.

**Determining Cost-Effectiveness of Mitigation Measures**

A key criterion for mitigation projects to be eligible for funding is that they must be cost-effective according to OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost analysis of Federal Programs. If the project benefits are higher than the project costs, then the project is cost-effective.

In order to insure a consistent approach in determining the cost-effectiveness of all mitigation projects, the state uses the FEMA benefit-cost analysis (BCA) software. Since this is also the method used by FEMA to determine the cost-effectiveness of a project, it is only reasonable that the state use the same method. The BCA is an assessment of the mitigation project to determine whether the cost of investing federal/state/local funds in a hazard mitigation project is justified by the prevented or reduced damages from future disasters.

It is understood that a positive benefit cost ratio ( $BCR > 1$ ) does not necessarily guarantee that a hazard mitigation project will be approved – but it does ensure that it meets the cost-effectiveness eligibility requirement. However, by applying project specific information to the benefit cost analysis module, we can get a good initial look at the mitigation potentials associated with that project. The results of this analysis can also help communities evaluate current and future mitigation projects and adjust their overall mitigation strategy accordingly.

For HMGP, the Ohio EMA Mitigation Branch develops data for projects that do not require an engineer to be involved for design and analysis (exceptions – stormwater management). For flood projects, this usually includes the development of four different elevations/frequencies of flood events and obtaining the lowest floor elevation. This data is developed in partnership with the USGS Ohio Water Science Center. For other hazard types, the data would be developed as needed. The Mitigation Branch strives to complete a full data analysis whenever possible – this is a task accomplished by trained Mitigation Branch staff. The Ohio HMGP project application, also, requires the necessary data needed for BCA analysis, depending on the mitigation option being pursued.

With the other four mitigation programs (PDM, FMA, SRL, RFC) the applicant is generally responsible for completing the BCA. Ohio EMA Mitigation Branch coordinates with FEMA to provide BCA training, conducts training, or provides one-on-one assistance with the applicant's BCA analyst. The Mitigation Branch also provides the FEMA BCA software and encourages the use of it.

**System to Rank Mitigation Measures According to the State's Eligibility Criteria (Evaluation criteria)**

The state's system to rank mitigation measures is different for the state plan (see *section 3.2*) for ranking mitigation projects submitted for funding under different

FEMA mitigation grant programs. The SHMT is responsible for evaluations of all projects submitted under the FEMA mitigation grant programs. Between the 2005 plan and 2008 update, the evaluation worksheets and criteria have changed somewhat (see *Appendix G: Mitigation Project Evaluation Forms*).

For HMGP projects, evaluation and ranking is a two-step process. First, pre-applications are submitted to Ohio EMA, usually within 10 weeks of the disaster declaration. Based on the pre-applications, the SHMT will evaluate the projects using the scoring forms provided by Ohio EMA Mitigation Branch. These forms combine basic criteria found in the CFR, criteria for the nationally competitive mitigation programs, and criteria based on Ohio priorities. After the pre-applications are reviewed and scored, the Floodplain Management Program will conduct an assessment of NFIP compliance, if a recent assessment has not been done. This is done for flood mitigation projects because NFIP compliance is a way to measure a community's day-to-day commitment to flood hazard mitigation.

The second step in HMGP project evaluation is for the SHMT to meet, after the Ohio EMA Mitigation Branch has fully processed the full project applications (conducted environmental review and benefit-cost analysis), to review and discuss all eligible projects. The SHMT again scores the projects using the same criteria that were used in scoring the pre-applications (obviously without needing to make as many assumptions). The scores are then used to determine which projects are funded under the program. In cases where a good, eligible project does not receive funding, Mitigation Branch staff work with the applicant to submit the application for funding under other FEMA mitigation programs, if applicable.

For projects submitted under the other FEMA mitigation programs, which are all pre-disaster programs, the SHMT also evaluates them; however, the evaluation criteria are exactly the same as used in the national competition (see *Appendix G*). The SHMT evaluates these projects based on the full project applications rather than the pre-applications and only reviews them once.

## **PROGRAM MANAGEMENT CAPABILITY**

A comprehensive state mitigation program should have effective program management capability. In 1998, Ohio was selected as one of the three "pilot" states to test the Managing State concept, which was to provide the state with more responsibility and autonomy in managing the FEMA mitigation programs. Selection was based on program management ability, well-documented fiscal controls and a strong, well-developed SHMT. In 2006, FEMA terminated the managing state, not only for Ohio but also for all states in the nation. The stated reason was that the DMA 2000 law established a mechanism for a "delegated state" program, and it was FEMA's opinion that such legislation superseded the managing state concept.

The benefits associated with Managing State status included: quicker project approval, ability to review, rank and select projects, pre-approval of

environmental reviews and pre-certification of local hazard mitigation plans. An approved project had to include a completion of a benefit cost analysis and environmental clearances from ODNR Division of Natural Areas and Preserves, US Department of Interior Fish and Wildlife Services, and Ohio Historical Preservation Office. Managing States perform the benefit cost analysis and approve the environmental review for each project prior to submitting the selected applications for FEMA's approval. The certified applications enable FEMA to process the applications quickly.

Environmental Reviews are conducted at the State level in conjunction with all applicable state and federal agencies. The State ensures that the local applicants are aware of the environmental review process and encourages them to provide as much information as possible before the review and contact of applicable agencies begins. The state then reviews each applicant's project for environmental information, prepares letters of review request to each applicable agency, prepares the REC, and forwards it to FEMA for concurrence and signature. A more detailed explanation of the process is located in the State of Ohio Hazard Mitigation Action Plan (see Appendix H).

A detailed breakdown of the benefit cost capabilities of the State Mitigation staff is located earlier in this section. Benefit cost runs and copies of each type of analysis is kept with each approved project.

The State of Ohio has a good record of providing timely, complete and accurate quarterly progress reports and financial reports. In each grant agreement, regardless of the program, applicants are required to submit quarterly progress reports within 15 days of the end of the quarter. Along with the quarterly monitoring and fiscal visits we conduct with each community, the mitigation branch then compiles a comprehensive narrative and financial quarterly report to the Region V Office within 30 days of the end of the quarter. A more detailed explanation of the quarterly report is located in the State of Ohio Hazard Mitigation Administrative Plan. All pre-disaster grant program projects are required to adhere to the same quarterly reporting process.

Project closeout and financial reconciliation are also described in detail in Administrative Plan and closeouts have been a strategic priority for several years. Mitigation staff conducts explicit reviews of the project or program closeout. The terms of the grant agreements and quarterly reports provided by the project applicant give a detailed summary of the project or program. On-site visits are conducted prior to the projects closeout and fiscal reconciliation.

Ohio EMA actively supports ongoing mitigation planning throughout the state. The Mitigation Branch staff and Ohio EMA field liaisons provide educational visits, technical assistance visits and planning presentations to facilitate the planning process in Ohio. The Mitigation Branch in cooperation with the ODNR-DOW, Floodplain Management Program developed the Ohio Mitigation Planning Guidebook, a FEMA Region V approved planning tool, for local jurisdictions to use in the development of all-natural hazard mitigation plans.

The final aspect of a comprehensive state mitigation program is to develop and present mitigation educational materials and conduct outreach relative to mitigation. Ohio EMA Mitigation Branch staff conducts mitigation planning courses, natural hazard planning workshops, technical assistance visits, program and project development meetings, and participates in public meetings. As changes occur in FEMA and Ohio EMA mitigation programs, the Mitigation Branch develops new presentation and courses to provide educational opportunities to the emergency management community in Ohio. Also, the Mitigation Branch maintains a web area on the Ohio EMA website.

The Mitigation Branch has one staff position devoted to hazard mitigation planning. The SHMO takes an active role in the planning process, training workshops and state agency coordination for all mitigation programs. Ohio EMA uses a field liaison system to ensure that all of Ohio's 88 counties are informed of any new programs being launched statewide or by FEMA. An example of this is the requirement of having approved local mitigation plans. The use of the field liaisons has been instrumental when dealing with communities on a one-on-one basis.

The ODNR Floodplain Management Program contributes to an overall state mitigation program. The goals and annual work plans of the FMP promote the mitigation value of the NFIP. Contact with local floodplain managers provides the FMP with opportunities to promote and support mitigation priorities at the community level.

The ODNR-DOW FMP and the Ohio EMA Mitigation Branch have successfully collaborated on many projects. ODNR staff has provided text, review, and comment on State of Ohio mitigation plans since 1999, and has helped establish mitigation priorities and strategies. ODNR has representatives supporting State Hazard Mitigation Team, which reviews HMGP applications and recommends grant award recipients. In addition, the ODNR-DOW FMP is actively engaged in working with Ohio communities to carry out duties related to evaluating flood damaged structures for substantial damage. This effort allows for the accessing of ICC funds and eases the benefit-cost requirement for severely damaged properties.

Staff from ODNR and Ohio EMA collaborated to create the Ohio Natural Hazard Mitigation Planning Guidebook in 2001. This document was developed to provide mitigation planning guidance to communities participating in the Appalachian Flood Risk Reduction Initiative (AFRRI). The AFRRI was a grant program created in 2002 (completed in 2006) that provided funding and technical assistance to develop DMA 2000 natural hazard mitigation plans in fifteen Appalachian communities. The goal of AFRRI was to ensure sustainable development by increasing local capability to address natural hazards. ODNR staff facilitated over 100 mitigation planning meetings in communities that participated in AFRRI. Some participating communities developed multi-jurisdictional plans and as a result of AFRRI, 41 jurisdictions are covered by natural hazard mitigation plans.

In 2007-2008 ODNR was part of a three-party agreement to assist with the completion of the HAZUS runs used in this plan for the hazard of flood. This was accomplished using the USACE's Planning Assistance to States program.

Region V completed an analysis of the Mitigation Branch's program management capability in 2002. The four categories the state was evaluated on include:

- Meeting all mitigation grant application timeframes and submitting complete, technically feasible and eligible project applications with supporting documentation;
- Preparing benefit-cost analyses and submitting accurate environmental reviews;
- Submitting complete and accurate quarterly progress and financial reports on time; and
- Completing all grant projects within established performance periods, including financial reconciliation.

The State of Ohio was found to be satisfactory in all categories and FEMA provided recommendations for improvement.

### **EFFECTIVE USE OF AVAILABLE MITIGATION FUNDING**

Appendix F shows that the State of Ohio has been very effective, and aggressive in pursuing available mitigation funding. Ohio is the only state in FEMA Region V that has successfully obtained funding in all of FEMA's mitigation programs. A review of the SRL project was submitted in May 2008. The Mitigation Branch has also developed mechanisms to ensure that funds are effectively used:

- Under HMGP, full project applications are developed based on 200% of the available funding. This ensures that there will be enough complete, eligible project applications to submit for funding before the application deadline has passed. If an application is developed and eligible, but not funded, Mitigation Branch staff will work to find another program under which it can be funded.
- The Mitigation Branch will keep PDM projects that are eligible but not funded as "shelf" projects to be submitted under another program or subsequent PDM cycles.
- Mitigation Branch and SHMT leverages other (non-FEMA) sources to fund mitigation projects. USACE's Planning Assistance to States, Floodplain Management Services, and HUD Disaster Supplemental funds have been used for mitigation planning and projects.
- "Zero-Funded Projects" are those actions that are currently prepared for implementation once funding becomes available. These projects have complete information and are prioritized.
- Due to the elimination of Compensatory Time and severe reduction of Overtime, budgeted HMGP funds may not be used as anticipated as

reserved under previous grants. However, it is the policy of the Mitigation Branch to maximize the use of federal funds as they become available.

### **3.5 COMMITMENT TO A COMPREHENSIVE STATE MITIGATION PROGRAM**

The State of Ohio has had a long-standing commitment to a comprehensive mitigation program. Certainly, the action items in Section 3.2 reflect this commitment. This commitment has been exhibited through past, existing and future initiatives. This section provides a thorough discussion of different dimensions of the states commitment, how each aspect has been implemented in the past and the states plan to continue said implementation.

#### **Local Mitigation Planning Support**

Local mitigation planning has been and will continue to be supported significantly. As stated earlier in the plan, all 88 counties in Ohio either have approved FEMA mitigation plans or are developing them. Ongoing training on developing/updating a local mitigation plan is provided by the Mitigation Branch through the training program at Ohio EMA, and future activities will be to determine the best approach to fund/assist with local plan updates. In addition, a web portal project is planned that would make local plans better integrated with the state plan, information would be made widely available, and make information easier to update.

During February and March 2009, under FEMA DR-1805-OH, Ohio EMA and ODNR conducted the OH-319 Hazard Mitigation Plan Update Workshop in six locations throughout the state, based on the Emergency Management Agency Association (EMAO) sectors. Local EMA Directors, County Planning Commission representatives and other Planners were invited to each workshop that provided the most recent planning guidance, cross reference checklists and examples how the new criteria should be addressed. Over 75 people participated with requests by Licking, Sandusky and Ross Counties to address their Hazard Mitigation Planning Core Groups in preparation for updating their Plans.

Ohio EMA also participated alongside ODNR in Flood Risk Information Open House meetings for Ross and Tuscarawas Counties as part of the Map Modernization Process. These meetings were held in conjunction with the preliminary map release. Ohio EMA intends to maintain this supporting this effort as the program continues.

#### **SHMT Improvement**

The collaborative power of the SHMT is understood. Invitations were sent to additional organizations with the intent to expand the SHMT to allow for better program integration/utility.

#### **Providing Non-Federal Match**

As mentioned before, Ohio has almost always accepted its responsibility to be an active partner in funding mitigation activities - \$36 million over 18 years is a clear demonstration of this.

**Use and Promotion of National Building Codes**

Since 1998, Ohio has been utilizing the I-Codes as a basis for the Ohio Basic Building Code. The code is mandatory statewide for over 4-family, commercial, and industrial structures and is optional for residential structures up to 4 families in size. The building codes include provisions to meet flood and wind requirements, and simultaneously allow communities to adopt and enforce higher standards for floodplain management should they choose to do so.

**Integration of Mitigation in Post Disaster Recovery Operations**

Ohio is a true partner with FEMA during disaster events. Ohio EMA is a presence at the Joint Field Office and the Mitigation Branch is fully staffed and functional at these facilities. There is comprehensive Mitigation Strategy that is prepared after every event, and all Ohio agencies involved in mitigation activities are involved.

During FEMA DR-1805-OH, the Mitigation Branch was collocated in the JFO Mitigation Section with federal counterparts. As a result, this joint team crafted the Mitigation Action Plan for 1805 (ref: Appendix H, this Plan) that included objectives and priorities under HMGP, promotion of local mitigation planning and outreach/best practices as well as NFIP coordination with FEMA and ODNR.