



Hazard Mitigation Planning Training and Technical Assistance Modules

OVERVIEW

The Federal Emergency Management Agency (FEMA) Region III recognizes the importance of hazard mitigation planning and provides training and technical assistance to support community partners in all phases of the planning process.

Using training materials focused on how to meet and exceed federal requirements, FEMA Region III is offering workshops for communities looking to learn more about best practices and opportunities to reduce risk when developing or updating their Hazard Mitigation Plans (HMPs).

These workshops are also tailored to assist communities during the five-year planning cycle while HMPs are prepared, implemented, and updated as part of a sustained and comprehensive process.

The training materials are organized in four modules as shown below.



Training and Technical Assistance Modules

Available as a webinar or in-person training!

 <p>Planning Process (2-Hour Duration)</p>	 <p>Conduct a Risk Assessment (3-Hour Duration)</p>	 <p>Develop a Mitigation Strategy (2-Hour Duration)</p>	 <p>Adopt, Maintain, and Implement the Plan (2-Hour Duration)</p>
<ul style="list-style-type: none"> • Building the Right Team • Participation and Engagement • Plan Integration 	<ul style="list-style-type: none"> • Identifying and Profiling Hazards • Identifying and Profiling Exposed Community Assets • Assessing and Summarizing Vulnerability and Impacts • Assessing Risk 	<ul style="list-style-type: none"> • Assessing Capabilities • Developing Mitigation Goals • Identifying and Evaluating Alternative Mitigation Actions • Preparing Implementation Plans • Setting Priorities 	<ul style="list-style-type: none"> • Review, Adoption, and Approval of the Plan • Plan Maintenance • Implementing Mitigation Actions

In addition, FEMA Region III provides technical assistance to help communities develop scopes of work prior to initiating their planning efforts and implement mitigation actions identified in their hazard mitigation plans.

Please contact your FEMA Region III Planner or State Hazard Mitigation Officer to request training and technical assistance for your community!

Helpful Terms

The following terms reflect how FEMA defines hazard mitigation planning and major phases of the hazard mitigation planning process:

<p>Hazard Mitigation Planning</p>	<p>Hazard mitigation includes any action taken to reduce loss of life, injuries, and property damage by lessening the impact of disasters. Types of mitigation actions may include:</p> <ul style="list-style-type: none"> • Local Plans and Regulations • Structure and Infrastructure Projects • Natural Systems Protection • Education and Awareness Programs <p>Hazard mitigation is most effective when implemented as a sustained effort under a comprehensive hazard mitigation plan. State, tribal, and local governments engage in hazard mitigation planning to identify vulnerabilities and assess risks associated with natural disasters and develop long-term strategies for reducing risk and protecting people and property from future hazard events. Hazard mitigation planning is key to breaking the cycle of disaster damage, reconstruction, and repeated damage.</p> <p>The hazard mitigation planning process is slightly different for state, tribal, and local governments. Regardless of community type, there are four core steps in completing or updating a hazard mitigation plan. These four steps are reflected in the hazard mitigation planning modules noted on the previous page.</p>
<p>Scope of Work</p>	<p>The Scope of Work (SOW) for a hazard mitigation planning effort describes what will be accomplished and identifies the parties responsible for contributing to the effort. A SOW is required to obtain grant funding from FEMA's Hazard Mitigation Assistance programs but is a best practice regardless of the funding source.</p>
<p>Participation and Engagement</p>	<p>Participation and Engagement is a key part of the hazard mitigation planning process and ensures everyone has a role in the process and enables communities, businesses, and governments to work together to better understand risk, identify comprehensive solutions, and follow-through on implementation.</p>
<p>Risk Assessment</p>	<p>A Risk Assessment is a process to identify, collect, and analyze data regarding the implications of all hazards that may impact the community. The intent is to inform decision-making regarding actions to mitigate the identified risk and setting priorities for action implementation. The Risk Assessment is the foundation for the Mitigation Strategy to reduce future losses.</p>
<p>Mitigation Strategy</p>	<p>The Mitigation Strategy is made up of three main required components: Mitigation Goals, Mitigation Actions, and an Implementation Plan. These provide the framework to identify, prioritize, and implement actions to reduce risk to identified hazards.</p>
<p>Plan Implementation</p>	<p>The Implementation Plan puts the community's hard work into motion and focuses on the activities necessary to implement specific mitigation actions as well as maintain the effectiveness of the hazard mitigation plan as a fundamental tool for risk reduction.</p>



Hazard Mitigation Planning Training and Technical Assistance Modules PLANNING PROCESS

A sustained, comprehensive **Planning Process** will build on previous planning efforts to:

- Engage the whole community in the process
- Improve community partnerships
- Increase awareness of hazards and risks
- Communicate priorities
- Align with other community objectives



The **Planning Process** workshop includes three submodules. These submodules will help your community answer important questions as you prepare for and undertake the hazard mitigation planning process. The **Planning Process** module also includes guidance for how to successfully document your planning efforts.



<p>Building the Right Team</p> <p>How do you select and organize people to form an effective Planning Team?</p> <p>In addition to participants in previous hazard mitigation planning efforts, involving all interested, affected, and responsible parties will lead to successful risk reduction for your community by:</p> <ul style="list-style-type: none"> • Reflecting community’s values • Incorporating local knowledge regarding current risks, assets, and capabilities • Initiating a sustained effort to develop and maintain the plan as well as implement recommended mitigation actions
<p>Participation and Engagement</p> <p>How do you garner public support?</p> <p>Public support enables communities, businesses, and governments to work together to better:</p> <ul style="list-style-type: none"> • Understand risk • Identify comprehensive solutions • Follow-through on implementation
<p>Plan Integration</p> <p>How can you incorporate hazard mitigation into other existing community plans and programs?</p> <p>Plan integration will help:</p> <ul style="list-style-type: none"> • Align community goals, objectives, and prime concerns • Avoid lost opportunities • Eliminate duplication of efforts



Helpful Terms

The following terms reflect how FEMA characterizes participants in the hazard mitigation [Planning Process](#):

<p>Plan Owner</p>	<p>Entity sponsoring development of a Hazard Mitigation Plan (HMP). This may include States/Commonwealths, the District of Columbia (DC), Counties, Planning District Commissions, Planning and Development Councils, individual communities or academic institutions as Disaster-Resistant Universities (DRUs).</p> <p>When FEMA’s Hazard Mitigation Assistance (HMA) planning grants are used to develop an HMP, the Plan Owner is typically the grantee (for States and DC) or subgrantee (for all others). It is assumed there will be a designated POC at the Plan Owner level for communications with FEMA, the State (if applicable), the Plan Developer(s), and the Planning Consultant (if applicable).</p>
<p>Participating Jurisdiction</p>	<p>Any eligible incorporated jurisdiction or public entity (e.g., a college or university) that is engaged throughout the planning process and intends to formally adopt the HMP. For a single-jurisdictional HMP, the Participating Jurisdiction is also the Plan Owner. For multi-jurisdictional HMPs, the Plan Owner may also be a Participating Jurisdiction.</p>
<p>Planning Team</p>	<p>Effective planning ensures that the whole community is represented and involved in the planning process. The most realistic and complete HMPs are prepared by a diverse planning team, including representatives from the jurisdiction’s departments and agencies, civic leaders, businesses, community organizations (e.g., civic, social, faith-based, humanitarian, educational, advocacy, professional) and concerned citizens who are able to contribute critical perspectives and/or have a role in executing the HMP.</p>
<p>Plan Developer</p>	<p>Designated point of contact for a Participating Jurisdiction working with the Plan Owner and Planning Consultant (if applicable) and supporting efforts of their Planning Team.</p>
<p>Planning Consultant</p>	<p>Term includes private planning consultants, academic institutions, or non-profit organizations that work under contract to the Plan Owner to provide comprehensive or selected professional and technical support for developing or updating an HMP. If HMA funds are used for developing an HMP, Planning Consultant services must be procured in a manner consistent with the Code of Federal Regulations. The Planning Consultant will work to support the Plan Owner and all Participating Jurisdictions. Work with a Participating Jurisdiction may include working solely with the Plan Developer or also engaging with the Planning Team pending community preferences and/or budget constraints.</p>
<p>Floodplain Administrator</p>	<p>The Floodplain Administrator or Floodplain Manager for a community is responsible for ensuring NFIP compliance in that participating community. Role typically includes policy and procedural inputs relating to development in the floodplain, for instance via floodplain ordinance updates, review of floodplain permits, and coordination on mitigation activities.</p>
<p>Plan Integration</p>	<p>Plan integration is a process where communities look critically at their existing planning framework and align efforts. Integration of hazard mitigation principles into other local planning mechanisms (comprehensive plans, transportation plans, floodplain ordinances, etc.) and vice versa is vital to build more resilient communities. This two-way exchange of information supports community-wide risk reduction, both before and after disasters occur. Not only will the community’s hazard mitigation planning efforts be better integrated into parallel initiatives, but by going through this process there is a higher level of interagency coordination.</p>



Hazard Mitigation Planning Training and Technical Assistance Modules

CONDUCT A RISK ASSESSMENT

Risk Assessment identifies hazards that threaten your community and potential impacts to people, structures, infrastructure, and natural systems.

Collecting and analyzing data regarding the implications of all hazards that may impact your community will inform decision-making about:

- Actions to mitigate the identified risk
- Priorities for action implementation



The **Conduct a Risk Assessment** workshop includes four submodules. These submodules will help your community answer important questions to develop a foundation for the hazard mitigation planning process.



Identifying and Profiling Hazards

How do you know which hazards threaten your community and how bad it can get?

Identifying and Profiling Hazards will:

- Identify all hazards that may adversely impact a community's assets
- Provide the best available information to help determine hazard impacts
- Reflect any changes in hazards since the current HMP was approved including hazards that may not have been previously considered by the community

Identifying and Profiling Exposed Community Assets

How do you know which community assets may be exposed and vulnerable to impacts from identified hazards?

Identifying and Profiling Exposed Community Assets will:

- Identify and characterize public and private property that is exposed and may be vulnerable
- Reflect changes in community assets since the current HMP was approved
- Anticipate any potential issues for future development



Assessing and Summarizing Vulnerability and Impacts

How do you make informed decisions when identifying mitigation actions and prioritizing resources?

Assessing and Summarizing Vulnerability and Impacts will:

- Indicate how exposed community assets may be impacted including related effects on people and local economic activity
- Provide a basis for making relative risk determinations and establishing prioritization of mitigation actions
- Provide actionable information for existing and future development
- Identify the best tool to use for your risk assessment

Assessing Risk

How can you find detailed answers on how assets may be affected by hazards to improve your ability to make important decisions about priorities and enable in-depth discussions on mitigation actions?

Assessing Risk will:

- Produce estimates of average annualized losses for community assets
- Provide an approximation of potential benefits (e.g. losses avoided) of potential mitigation actions for Benefit-Cost Analyses, political review, etc.

Helpful Terms

The following defines how FEMA uses key terms related to **Risk Assessment**:

Hazard Profile	A hazard profile is a description and analysis of a specific type of local hazard. It is performed for each natural hazard and based off of criteria such as extent, duration, speed of onset, and probability of occurrence.
Probability	Probability is a numerical index of risk; a measure of the likelihood that the event will occur. If the event is sure to occur, the probability is 1.0; if it cannot occur, the probability is 0.0.
Asset	An asset is any man-made or natural feature that has value, including but not limited to people, buildings, infrastructure (such as bridges, roads, and sewer and water systems), and lifelines (such as electricity and communication resources or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks).
Vulnerability	Vulnerability is the susceptibility of people, property, industry, resources, ecosystems, or historical buildings and artifacts to the negative impact of a disaster. Vulnerability assessment provides the extent of injury and damages that may result from a hazard event of a given intensity in a given area.
Risk	Risk is the probability of an estimated impact a hazard event would have on people, services, facilities, and structures in a community. It refers to the likelihood of a hazard event resulting in an adverse condition that causes injury or damage.
Flood Hazard Area	Area shown to be inundated by a flood of a given magnitude on a map.
Repetitive Loss Property	A property that is currently insured for which two or more National Flood Insurance Program losses (occurring more than ten days apart) of at least \$1,000 each have been paid within any 10-year period since 1978.



Hazard Mitigation Planning Training and Technical Assistance Modules DEVELOP A MITIGATION STRATEGY

The **Mitigation Strategy** reflects Risk Assessment results and current local capabilities to:

- Develop mitigation goals and objectives
- Identify and evaluate mitigation actions that provide comprehensive solutions to identified problems
- Formulate implementation plans to increase long-term community resilience



The **Develop a Mitigation Strategy** workshop includes five submodules. These submodules will help your community establish goals, identify and evaluate potential mitigation actions, articulate key aspects of how to implement the actions including identifying responsible and capable individuals and organizations.



Assessing Capabilities

How do you know your community's strengths and weaknesses for planning and implementing mitigation actions?

Assessing Capabilities will:

- Review and confirm/validate capabilities previously identified in your community's current approved HMP
- Identify and evaluate all current capabilities including those that may not already have been considered to help your community understand what you can do to support planning and implementation (e.g., Authorities, Policies, Programs, and Resources)
- Review how well your community complies with the National Flood Insurance Program requirements (if applicable)

Developing Mitigation Goals

How can your community articulate problems identified in the Risk Assessment as well as opportunities and shortfalls identified in the Capability Assessment?

Developing Goals will:

- Link risk and capability assessments results with appropriate mitigation actions
- Represent what the community seeks to achieve and provide a blueprint to guide the remaining steps in developing the Mitigation Strategy



Identifying and Evaluating Alternative Mitigation Actions

How will your community determine which actions will yield the best value and most effective results within existing (staff and budget) or projected capabilities (local funding supplemented by grants, etc.)?

Identifying and Evaluating Alternative Mitigation Actions will:

- Identify and evaluate a comprehensive range of specific mitigation actions addressing each goal/objective or problem statement, including problems that may be carried over from the current approved HMP
- Develop preferred alternatives for implementation based on engineering feasibility, local capabilities, funding availability, etc.

Preparing Implementation Plans

How will your community complete the HMP planning process and connect the results to operational reality?

Preparing Implementation Plans will identify for each Mitigation Action:

- Hazards addressed
- Lead and support agencies, municipalities, and/or champions
- Funding and Schedule
- Other items to help you implement, e.g., next step in the implementation process

Setting Priorities

How do you represent the relative importance of each mitigation action and reflect the community's concerns and values but acknowledge that there are never enough resources to go around?

Setting Priorities helps guide implementation efforts by clearly identifying the sequence for implementing mitigation actions

Helpful Terms

The following defines how FEMA uses key terms related to **Mitigation Strategy**:

Mitigation Goals	<p>Mitigation Goals are general guidelines that explain what the community wants to achieve with the plan. They are usually broad, policy-type statements that are long-term, and represent visions for reducing or avoiding losses from the identified hazards.</p> <ul style="list-style-type: none"> • Example 1 – Reduce losses due to flooding • Example 2 – Prevent damage to structures and infrastructure
Mitigation Actions	<p>Mitigation Actions are specific projects and activities that help achieve the goals. The implementation of actions helps achieve the plan's mission and goals. The actions form the core of the HMP and are a key outcome of the planning process.</p> <p>Types of Mitigation Actions may include Local Plans and Regulations, Structure and Infrastructure Projects, Natural Systems Protection, or Education and Awareness Programs.</p>
National Flood Insurance Program (NFIP)	<p>The NFIP aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners, renters and businesses and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socio-economic impact of disasters by promoting the purchase and retention of general risk insurance, but also of flood insurance, specifically.</p>



Hazard Mitigation Planning Training and Technical Assistance Modules

ADOPT, MAINTAIN, AND IMPLEMENT THE PLAN

Gaining approval for a Hazard Mitigation Plan (HMP) is a very important step but not the end of the process. Just as important is how the HMP is maintained and implemented to reduce risk and improve resiliency.

Sustained HMP **Adoption, Maintenance, and Implementation** efforts yield concrete results:

- Adoption enables FEMA approval
- Monitoring and evaluation support ongoing updates and revisions
- Implementation reduces risk and improves long-term resilience



The **Adopt, Maintain, and Implement the Plan** workshop includes three submodules. These submodules will help your community understand the HMP review and approval process, establish a sustained process for maintaining the integrity and relevance of the HMP, and moving forward with implementation of mitigation actions.



Review, Adoption, and Approval of the Plan

How do you establish expectations for implementation roles and responsibilities and ensure your community is eligible for FEMA’s Hazard Mitigation Assistance (HMA) grant funding?

Review, Adoption, and Approval of the Plan will:

- Reflect all the good effort and resources dedicated to the HMP update process
- Document your elected officials buy-in and formal adoption of the HMP
- Secure approval from FEMA

Plan Maintenance

How will your community maintain momentum, institutionalize and integrate mitigation principles, account for changing conditions, and build on successes?

Plan Maintenance will:

- Monitor and evaluate progress in implementing the Mitigation Strategy
- Ensure the HMP is updated to reflect real-time changes in the community
- Support ongoing community mitigation and resilience involvement



Implementing Mitigation Actions

How will your community bring the HMP to life?

Sustain the implementation effort by:

- Establishing accountability measures
- Creating realistic timelines tied to budget cycles and funding opportunities

Using community partnerships and supported developed through the planning process

Helpful Terms

The following defines how FEMA uses key terms related to the **Adopt, Maintain, and Implement the Plan** module:

Plan Maintenance	<p>Plan Maintenance is the process by which the HMP is periodically reviewed, maintained, and updated as needed to reflect progress in implementing identified mitigation actions, new information about hazards and assets that may become available, and how the community will respond to issues that may arise (e.g., changes in community capabilities during the period following the HMP adoption and approval process up until the next HMP update process is formally engaged).</p> <p>Plan Maintenance involves three distinct efforts:</p> <ul style="list-style-type: none">• Monitoring = Tracking HMP implementation through periodic reviews by the Plan Owner and sustained involvement by the Planning Team.• Evaluating = Assessing effectiveness of the HMP at achieving its goals• Updating = Revising the HMP to keep it current (at least once every 5 years) <p>Note: When you update your plan regularly, you'll have less to do at the 5-year update</p>
Hazard Mitigation Assistance (HMA) Program	<p>FEMA's Hazard Mitigation Assistance (HMA) Program include the following three Core mitigation grant programs:</p> <ul style="list-style-type: none">• Pre-Disaster Mitigation Grant Program (PDM) / Building Resilient Infrastructure and Communities (BRIC) Grant Program• Pre- Disaster Flood Mitigation Assistance (FMA)• Post-Disaster Hazard Mitigation Grant Program (HMGP)