

PART 1 – STANDARD STATE MITIGATION PLANS

The mitigation plan demonstrates the State's commitment to reducing the risks from natural hazards, and should serve as a guide for all levels of State decision makers. The plan should detail how the State will address planning for natural hazards and the resources they are going to commit to the process.

The Plan, [whether a first-time submittal or an updated plan](#), must meet certain basic requirements to receive approval, including:

- The mitigation strategy should be based on local and State vulnerability analyses and risk assessments.
- The State must describe how they will coordinate with local mitigation planning efforts.
- The State must describe how they will provide funding or technical assistance to local governments.
- The State must discuss how they will prioritize jurisdictions that will receive mitigation planning and project grants and other State assistance.
- There must be a formal plan maintenance process.

Each requirement must receive a satisfactory score for the plan to be approved. Each State submitting a hazard mitigation plan must meet the Prerequisite – Adoption by the State, before the plan can be approved by FEMA.

The sections covered in Part 1 – Standard State Mitigation Plans include:

- Prerequisite – Adoption by the State
- Planning Process
- Risk Assessment
- Mitigation Strategy
- Coordination of Local Mitigation Planning
- Plan Maintenance Process

PREREQUISITE

ADOPTION BY THE STATE

**Requirement
§201.4(c)(6) and
§201.4(c)(7):**

The plan must:

- be formally adopted by the State prior to submittal to [FEMA] for final review and approval [and]
- include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c). The State will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

Explanation:

An appropriate body in the State **must** adopt the plan. This could be, for example, the State Legislature or the Governor, depending on the State's established procedures. States with hazard mitigation teams or councils may choose to use these bodies to adopt the plan. At a minimum, the plan **must** be endorsed by the director of the State agency responsible for preparing and implementing the plan, as well as the heads of other agencies with primary implementation responsibilities.

Adoption by the State:

- Demonstrates the State's commitment to fulfilling the mitigation objectives outlined in the plan.
- Legitimizes the plan and authorizes the responsible agencies identified in the plan to execute their responsibilities.

The section on assurances relates to the State's understanding and accountability in complying with Federal statutes and regulations in effect when it receives grant funding as prescribed in 44 CFR 13.11(c).

Additionally, as required in 44 CFR 13.11(d), the State **must** amend its plan to reflect new or revised Federal regulations or statutes, or changes in State law, organization, policy, or State agency operation. The amendment can be added as an annex to the plan and later incorporated into the appropriate section(s) when the plan is formally updated as required in §201.4(d) of the Rule.

The resolution of adoption can include a statement assuring FEMA that the State will comply with both of these CFR requirements.

The plan **must** include a copy of the resolution of adoption.

Plan Update:

An appropriate body in the State **must** adopt the updated plan regardless of the degree of modifications to the original plan.

PART 1 – STANDARD STATE MITIGATION PLANS

Resource: For more information about adopting a mitigation plan, see:

✓ *Bringing the Plan to Life* (FEMA 386-4), Step 1.

Scoring:

- Not Met. The plan has not been formally adopted by the State.
- Not Met. The plan has been formally adopted by the State, but a copy of the signed resolution is not included.
- Met. The plan has been formally adopted by the State, and a copy of the signed resolution is included.

PLANNING PROCESS

§201.4(b) recommends that the State coordinate with other State agencies, appropriate Federal agencies, and interested groups during the planning process. Early involvement of other parties provides the opportunity for integration of mitigation actions with other planning efforts. It also allows for building partnerships with other agencies and interested groups to facilitate data gathering, analysis, and later implementation of mitigation strategies. §201.4(c)(1) requires that the State document this planning process.

The planning process is the heart of both the original mitigation plan and updates to that plan. In a plan update, the description of the planning process is intended to inform the reader what steps the planning team took to review, evaluate, and update each section of the plan, as well as provide the rationale for sections that were not changed. It should be based on the update process described in the plan maintenance section of the previously approved plan. This is the blueprint for constructing the updated plan, and instills within it a necessary continuity.

States may experience fluctuations in staffing and in-house knowledge of the hazard mitigation planning process. The description of the planning process will be especially valuable to new staff and successive leaders as it provides a clear and coherent picture of the steps taken to update the plan. Also, during intense decision-making situations, such as the period following a catastrophic event¹, an understanding of the planning process and the rationale used to develop the risk assessment and mitigation strategy will be of assistance as mitigation priorities are reassessed and revised.

This section includes the following three subsections:

- Documentation of the Planning Process
- Coordination Among Agencies
- Program Integration

¹ *any large scale event, the result of either man made or natural hazards, that, for a protracted period, affects governments' ability to conduct and deliver the day to day civil functions and services, and has long-term consequences for the local, state or national economy.*

DOCUMENTATION OF THE PLANNING PROCESS

Requirement §201.4(c)(1):

[The State plan must include a] description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

Explanation:

A description of the planning process **must** include how the planning team or committee was formed, how input was sought from individuals or other agencies, and how the plan was prepared.

Plan Update:

Documentation of the planning process is required for the update. The update **must** describe the process used to review and analyze each section of the plan. If the planning team or committee finds that some sections of the plan warrant an update, and others do not, the process the team undertook to make that determination **must** be documented in the plan.

Resource:

For more information on the planning process, see:

- ✓ *Getting Started* (FEMA 386-1), Steps 1 – 4.

Examples:



Original Submittal:

The State Hazard Mitigation Plan (the Plan) was prepared by the State Hazard Mitigation Section. This section, created in 2001 and headed by the State Hazard Mitigation Officer, is responsible for leading and coordinating mitigation and long-term redevelopment efforts.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(1)		<ul style="list-style-type: none"> ▪ The description does not provide details on how various parties were involved in the planning process, what meetings were held to solicit involvement, how long the process took, etc. ▪ The plan was prepared by only one State agency, with no mention of participation by other agencies or groups.

Required Revisions:

For a “Satisfactory” score, the plan must provide more details on how the plan was prepared and what agencies were involved.



Revised Submittal:

The State Hazard Mitigation Plan (the Plan) was prepared by the State Hazard Mitigation Section. This section, created in 2001 and headed by the State Hazard Mitigation Officer, is responsible for leading and coordinating mitigation and long-term redevelopment efforts. **The Hazard Mitigation Section organized a Hazard Mitigation Committee (HMC), composed of 14 representatives from Federal and State agencies, as well as local governments, the private sector, and non-profit and civic organizations to assist the section in preparing the Plan (see pages X, Y, and Z for a list of these agencies). Not all invited civic or non-profit groups or business leaders agreed to join the HMC. However, two regional public forums were organized: one at the beginning of the planning process to elicit concerns and solicit ideas; and a second public forum was held for the general public to review and comment on the draft plan. These forums were widely publicized in local newspapers, and flyers were mailed to agencies that had expressed an interest in participating in some capacity. Citizens and interested groups could also access the State public Web site to review the draft plan and provide comments online. The HMC met every two weeks for the first three months and later once per month. The plan was completed over a 12-month period.**

COORDINATION AMONG AGENCIES

**Requirement
§201.4(b):**

The [state] mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and

Explanation:

In order to encourage States to develop plans that will be used as guides for statewide mitigation activities, and for citizens and the private sector to support such activities, the Rule recommends States demonstrate coordination with all levels of government, and representatives from the private and non-profit sectors. The plans *should* describe how the State interacted with Federal, State, regional, and local agencies, as well as other interested parties such as business, industry, and professional associations, non-profit groups, and community representatives in the development of the plan.

Of particular importance is the participation by agencies and groups that can contribute resources to prepare the plan and by agencies that will likely implement mitigation actions. By including these agencies in the planning process, the State can build partnerships that will facilitate the implementation phase of the plan. Merely contacting agencies to solicit input or sending a draft plan for an agency to review does not constitute active participation. Participants *should* play an active role throughout the planning process and, whenever possible, be involved from the beginning. The State *should* identify additional participants as opportunities arise (e.g., after a disaster).

Examples of how coordination may be demonstrated:

- Description of outreach efforts to engage interested parties.
- Description of the types and frequency of meetings of task forces and committees, inter-disciplinary/inter-agency mitigation planning teams, or with interested agencies and private sector organizations.
- Discussion of the nature of the Memoranda of Understanding (MOU) or other work agreements.
- Description of how interested parties who could not participate on a regular basis were kept informed and how they provided comments.

Plan Update:

The updated plan *should* describe how the State interacted with all levels of government as indicated above. It *should* also describe how coordination among agencies changed over the past three years.

Resource:

For information on establishing a mitigation planning team and building partnerships, see:

- ✓ *Getting Started* (FEMA 386-1), Step 2.

Examples:



Original Submittal:

The State Hazard Mitigation Committee (HMC) distributed the mitigation plan to other State, Federal, and local agencies. Each participating agency had an opportunity to comment on preliminary and draft versions of the plan. The HMC incorporated appropriate comments and distributed a final copy of the plan to the participants.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(b)		<ul style="list-style-type: none"> ▪ Coordination only involved notification of other government agencies. ▪ No effort was documented regarding contacting or soliciting involvement from civic, private, or not-for profit groups, including those known to assist in the event of disasters.

Required Revisions:

A "Needs Improvement" score on this requirement will not preclude the plan from passing. For a "Satisfactory" score, the mitigation plan must demonstrate that the planning process included active coordination with and participation by other agencies and/or groups.

Special Considerations:

This may not be an easy item to "fix" if adequate coordination has not occurred to date. The State would have to take its plan back for review by potential participants and revise the content according to their input. This could be a substantial effort. On the other hand, if the State actually did the coordination, but did not describe it adequately, then the State needs to do a better job of documenting its coordination effort.



Revised Submittal:

The State Hazard Mitigation Committee (HMC) ~~distributed~~ **coordinated the development of** the mitigation plan ~~to~~ **with** other State, Federal, and local agencies. **The HMC, on behalf of the Governor, also solicited participation from industry associations, volunteer agencies, and other private and non-profit sector representatives. Fourteen representatives in total committed their time and available resources to develop a mitigation strategy that would protect life, property, and the environment as well as contribute to the economic well being of the State.**

PART 1 – STANDARD STATE MITIGATION PLANS

Each participating agency **and group presented its programs, identified mitigation opportunities, and subsequently** had an opportunity to comment on preliminary and draft versions of the plan. **The HMC jointly reviewed each agency’s function and identified more opportunities, including some applicable to agencies not present.** The HMC incorporated appropriate comments and distributed a final copy of the plan to the participants.

Agency	Designated Responsibilities
State Office of Natural Resources	To review mitigation project applications and plans to ensure their environmental soundness.
State Building Code Office	To provide information about State building code requirements and best construction practices.
State Office of Economic Development	To identify opportunities to promote economic development through mitigation initiatives. To act as a liaison between local economic development agencies and the HMC to identify ways in which economic development initiatives can encourage mitigation.
State Office of Emergency Management	To coordinate mitigation planning and project implementation. To serve as a liaison between FEMA’s Federal Insurance and Mitigation Administration and the HMC.
State Public Works and Utility Office	To help local communities identify mitigation actions for public infrastructure. To identify state resources and infrastructure vulnerable to hazards.
State Department of Transportation	To help local communities identify mitigation actions for State roads and bridges. To identify state resources and infrastructure vulnerable to hazards.
State Planning Office	To educate local governments (specifically local planning departments) on new hazard mitigation planning requirements and to aid in the incorporation of mitigation concerns into local comprehensive planning efforts.
State Historic Preservation Office	To help communities identify ways to mitigate hazards that threaten historic resources in their communities. To assist communities identified in Section 106 review processes for mitigation projects in compliance with Federal and State historic preservation regulations.

PART 1 - STANDARD STATE MITIGATION PLANS

Agency	Designated Responsibilities
State Parks Association	To identify resources for acquiring funding to create green- and open-spaces as mitigation actions.
Association of Homebuilders	To represent private development interests and concerns in relation to mitigation projects and regulations.
Manufactured Housing Association	To identify best practices in constructing or reconstructing low-cost, manufactured housing threatened by hazards.
Big River Watershed Society	To coordinate efforts to improve water quality, recreation activities, and other concerns with State mitigation activities.
State Association of Disaster Relief	To provide insight into mitigation actions as they relate to response and recovery.
State Association of County Govt.	To liaison between HMC and local governments about hazard mitigation planning requirements. To educate local officials about the resources available for mitigation planning assistance and training.

PROGRAM INTEGRATION

**Requirement
§201.4(b):**

[The State mitigation planning process should] be integrated to the extent possible with other ongoing State planning efforts, as well as other FEMA mitigation programs and initiatives.

Explanation:

Coordination can result in identifying opportunities to integrate planning efforts and mitigation actions. FEMA has found that mitigation plan implementation is most effective when States integrate mitigation planning efforts with those of other State planning programs and initiatives.

States might demonstrate that they have made efforts at integration by:

- Reviewing existing plans and reports to identify opportunities to integrate mitigation actions.
- Having mitigation planners/specialists serve on other State program and planning teams.
- Consolidating the planning requirements for all State mitigation programs (e.g., HMGP, FMA, CRS, local comprehensive plans, and land use plans).
- Identifying overall goals or priorities common to other State planning efforts.
- Requesting that legislation be passed or issuing an Executive Order mandating integration of mitigation actions into other planning initiatives.
- Outlining the State’s approach and providing a timeline for integrating actions.
- Describing actual ongoing efforts where mitigation actions have been integrated into planning mechanisms (e.g., comprehensive plans, capital improvement plans, and emergency operation plans) and implementation tools (e.g., building codes, floodplain ordinances, and land use regulations).

Plan Update:

The update *should* discuss State planning integration efforts and opportunities that were identified in the previously approved plan, any unforeseen obstacles that emerged in the past three years, and any new State planning integration efforts.

Resource:

For information on integrating hazard mitigation actions with other initiatives, see:

- ✓ *Bringing the Plan to Life* (FEMA 386-4), Step 2.

Examples:



Original Submittal:

The State Hazard Mitigation Committee (HMC) reviewed several State agencies' plans to identify programs and policies that promote hazard mitigation.

Twenty communities currently participate in the Community Rating System (CRS), part of the National Flood Insurance Program. Each has prepared a flood mitigation plan and has received funding for flood mitigation projects.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(b)		<ul style="list-style-type: none"> The plan does not describe all programs or policies examined, nor does it identify the mitigation efforts to be integrated into the State's CRS program.

Required Revisions:

A "Needs Improvement" score on this requirement will not preclude the plan from passing. For a "Satisfactory" score, the mitigation plan must document how mitigation actions are integrated into other State planning efforts as well as Federal mitigation programs.



Revised Submittal:

The State Hazard Mitigation Committee (HMC) reviewed several State agencies' plans to identify programs and policies that **currently** promote hazard mitigation ~~or could potentially further mitigation initiatives around the State (see Table XX for a summary of these findings).~~

One program the State is implementing is the Growing Smart Initiative, administered by the Division for Sustainable Development in the State Department of Planning and Development. The Growing Smart Initiative has several components related to hazard mitigation, including funding to encourage local governments to remove structures from high hazard areas, creating open space in environmentally sensitive areas such as the 100-year floodplain, and providing financial incentives to encourage businesses to upgrade facilities in central business districts. The HMC will continue its efforts to integrate hazard mitigation-related concepts into the existing Growing Smart framework through:

- **Developing brochures using the Growing Smart logo to**

promote hazard mitigation in the business community.

- **Discouraging development in hazard areas such as steep slopes with landslide potential.**
- **Educating local governments about the benefits of adopting building standards to mitigate against wind and earthquake hazards.**

Additionally, the Department of Public Works takes into account hazard-prone areas when siting facilities and infrastructure such as water and sewer lines. The Public Works Department avoids such areas, thereby discouraging development while protecting services in the event of a disaster.

Twenty communities currently participate in the Community Rating System (CRS), part of the National Flood Insurance Program. Each **community** has prepared a flood mitigation plan and has received funding for flood mitigation projects (**see Appendix XX for details**). **Additionally, the State is currently developing a strategy to assist other communities to participate in the CRS, having set a goal to provide technical support to five communities per year. The strategy includes providing additional funding to communities that have adopted FMA Plans, to upgrade these plans into all-hazard plans.**

RISK ASSESSMENT

§201.4(c)(2) of the Rule requires that States undertake a risk assessment that provides the factual basis for developing a mitigation strategy. This provision encourages States to produce a meaningful analysis of the hazards and vulnerabilities that affect them, enabling States to prioritize jurisdictions or geographic areas to receive funding and technical assistance for conducting more detailed local risk and vulnerability assessments.

The purpose of the updated risk assessment is to present the current statewide overview of potential losses to guide implementation of mitigation measures, to prioritize jurisdictions most at risk from natural disasters, and to integrate data provided in local risk assessments, where appropriate.

The updated risk assessment will also include the integration of new data, where available, such as National Flood Insurance Program maps or studies, HAZUS analyses, or reports from other Federal and State agencies. If the previously approved plan identified data deficiencies that would be addressed at a later time, then FEMA would expect the new information to be incorporated in the updated risk assessment. However, if the data deficiencies have not been resolved, they must be addressed in the updated plan, accompanied by an explanation of why they remain and an updated schedule to resolve the issue.

When the State plans were originally prepared, there were few local plans that met FEMA's planning requirements. Therefore, States had limited local information on which to base their plans. Since then, many local plans have been approved and adopted, providing States with the opportunity to better coordinate with local jurisdictions and ensure that local risk assessments complement the State risk assessment.

Additionally, section 201.4(d) requires the State plan be updated regularly to address changes in development and mitigation priorities. This is reflected in the guidance language under §201.4(c)(2)(ii) and §201.4(c)(2)(iii).

This section includes the following six subsections:

- Identifying Hazards
- Profiling Hazards
- Assessing Vulnerability by Jurisdiction
- Assessing Vulnerability of State Facilities
- Estimating Potential Losses by Jurisdiction
- Estimating Potential Losses of State Facilities

IDENTIFYING HAZARDS

Requirement §201.4(c)(2)(i): [The State risk assessment shall include an] overview of the type ... of all natural hazards that can affect the State

Explanation: A State hazard mitigation plan will only be effective if it accounts for all sources of risk. The intent of this requirement is to insure that all hazards potentially affecting the State are identified.

During the State's planning process (as evaluated in the Planning Process section of this document), it may be determined that some of these hazard types do not pose a significant enough threat to justify further study or the identification of corresponding mitigation actions. However, the mitigation plan *should* clearly document that a thorough and comprehensive identification of hazards was performed by the State, including the fact that certain hazards were deemed not to be significant enough to warrant further study, to receive a satisfactory score for this requirement.

This section *should* include a description of how the State collected the information to identify these hazards, including the sources of information. This process *should* also include incorporating the results of local level mitigation planning efforts to identify hazards as that information becomes available.

Plan Update:

The updated plan **must** address any newly identified hazards or hazards that have been determined to pose a more significant threat than was apparent when the previously approved plan was prepared. If improved descriptions of hazards are available, they *should* be incorporated into this section.

Special Considerations: Although the Rule requires that States only identify natural hazards, States may include manmade hazards (i.e., technological or accidental events such as hazardous material accidents and terrorism or intentional acts such as the release of chemical agents) to provide a more complete analysis of hazards that may affect the States. However, plans will not be penalized for not including this information.

Resources: For more information on identifying hazards, see:

- ✓ *Understanding Your Risks* (FEMA 386-2), Step 1.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 2.
- ✓ HAZUS-MH at www.fema.gov/HAZUS/.

Examples:



Original Submittal:

The State Mitigation Plan addresses the risk associated with the following hazards:

- Drought
- Flooding
- Hurricanes

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(2)(i)		<ul style="list-style-type: none"> ▪ The plan did not include wildfires that have occurred in the past. ▪ The State did not indicate how these hazards were identified. As a result, it cannot be determined if this is a valid list of all relevant hazards. ▪ The State did not indicate if hazards identified as part of mitigation planning by local jurisdictions are or will be included in this listing.

Required Revisions:

For a “Satisfactory” score, the plan must include wildfires. The State is experiencing a drought and has had wildfires in the past under such conditions. While not required by the Rule, the plan should also document the process followed to identify hazards and identify the extent to which hazards identified through local mitigation planning have been or will be included in the State plan.



Revised Submittal:

The State Hazard Mitigation Committee (HMC) pursued the following steps to identify hazards that may affect the state:

- Review of past State and Federal disaster designations.
- Review of current Flood Insurance Rate Maps (FIRMs).
- Review of available local mitigation plans (see Appendix XX for a complete listing of local mitigation plans, including DMA 2000, FMA, and CRS, consulted as part of this planning process).
- Review of recent risk assessment related research by State and Federal agencies, as well as the State University's (SU) Emergency Management Program within the Department of Planning. This research involves long-range weather trends per the U.S. Meteorological Service as a predictor of potential periods of drought or increased hurricane activity and the probability of dam failures within the State per the recent SU study (see Appendix XX for a complete listing of studies consulted as part of this planning process).
- The HMC representative from the State Geological Survey was consulted regarding the earthquake risk in the State. She indicated that the risk was minimal (.001%/year of a 4.0+ earthquake); therefore, the HMC decided not to study the earthquake hazard any further.

As a result, the HMC determined that the State Mitigation Plan needed to address ~~addresses~~ the risk associated with the following hazards:

- Drought
- Flooding, **including related potential for dam failures**
- Hurricanes
- **Wildfires**

PROFILING HAZARDS

Requirement **§201.4(c)(2)(i):**

[The State risk assessment shall include an overview of the] location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate

Explanation:

The plan **shall** provide an overview of the **location** of all natural hazards that can affect the State. The plan *should* describe the geographic boundaries in the State that would be affected by these hazards.

Where appropriate, the hazard analysis *should* also broadly identify on a map the areas of the State affected by each hazard, noting those areas most severely affected by each hazard. A composite map (i.e., a map showing combined information from different thematic map layers) can be provided for hazards that have a recognizable geographic boundary (i.e., hazards that are known to occur in particular areas of the State), such as floods, coastal storms, wildfires, tsunamis, and landslides.

For those hazards that are not geographically determined, plans *should* indicate their probable intensity. For example, for areas where tornadoes occur, plans should indicate the recorded intensities of previous events.

The plan **shall** also provide a discussion of **past hazard events**. This discussion *should* include:

- Information on the damages that occurred (e.g., costs of recovery, property damage, and lives lost) to the extent practicable.
- Level of severity (i.e., flood depth or extent, wind speeds, earthquake intensity).
- Duration of event.
- Date of occurrence.
- Sources of information used or consulted for assembling a history of past occurrences.

The plan **shall** also include information on the **probability** of future hazard events. In addition, it *should* describe the analysis or sources used to determine the probability and their magnitudes.

The plan *should* also describe conditions (i.e., topography, soil characteristics, meteorological conditions, etc.) in the planning area that mitigate the hazard effects or make the area more vulnerable to hazards.

Plan Update:

The plan update **must** continue to include occurrences of hazards addressed in the previous plan, and discuss new occurrences of hazard events. The updated plan *should* incorporate any new studies or technical information related to profiling hazards, such as new National Flood Insurance Program maps or studies, HAZUS studies, or reports from other Federal or State agencies that relate to:

- Location of natural hazards;
- Past hazard events;
- Probability of future hazard events.

While maps are not required, any maps included in the updated plan **must** be consistent with the updated information.

Resource:

For more information on profiling hazards, see:

- ✓ *Understanding Your Risks* (FEMA 386-2), Step 2.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 2.
- ✓ HAZUS-MH at www.fema.gov/HAZUS/.

Examples:



Original Submittal:

[For illustrative purposes, only the flood hazard is profiled in this example.]

Through analysis of existing Federal Flood Insurance Rate Maps (FIRMs) and Flood Insurance Studies (FISs), the Hazard Mitigation Committee (HMC) determined that every County in the State may be affected by the flooding hazard. A variety of factors affect the type and severity of flooding throughout the State, including topography, urban development and infrastructure, and proximity to the coastline.

The State has been affected by a number of floods over the past several years. Most notably, Hurricane Young in 1997 caused flooding that generated a Presidential Disaster Declaration for the Counties of Allwater, Bedlam, Calm-before-the-Storm, and Turmoil. The flood caused several million dollars in damages.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(2)(i)		<ul style="list-style-type: none"> ▪ The plan did not include the location of the type of floods. ▪ The history of floods is only of recent years. ▪ The plan does not discuss probability. ▪ The State did not provide details

		<p>about conditions, such as topography, that could make areas more or less vulnerable to each hazard.</p> <ul style="list-style-type: none"> ▪ There is no indication of areas of the State that are more severely affected by each hazard. ▪ The State did not provide a map that identified the areas affected by each hazard.
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Required Revisions:

For a “Satisfactory” score, the plan must describe the hazard areas, provide a more complete history of past events, and include the probability of future hazard events. While not required by the Rule, the plan should also document the process used to determine differences in vulnerability to the hazard; differentiate the ways in which areas of the State are affected; and provide a map or other tool to delineate hazard areas.



Revised Submittal:

Flooding

Through analysis of existing Federal Flood Insurance Rate Maps (FIRMs) and Flood Insurance Studies (FISs), the Hazard Mitigation Committee (HMC) determined that every County in the State may be affected by the riverine flooding hazard (see Flood Hazard Map in Appendix XX). The State regularly experiences 10-year floods and has on several instances suffered the devastating effects of 500-year floods. See Appendix XX for a history of floods and their related damages dating back to 1850. This history was assembled from the information provided in local hazard mitigation plans as well as the previous State Hazard Mitigation Plan.

The probability of a flood event is expressed as the percent chance that a flood of a specific magnitude will occur in any given year. Table 1 summarizes the associated chance of occurrence for the type of floods the State has experienced.

Table 1: Flood Probability of Occurrence	
Flood Return Intervals	Chance of Occurrence in Any Given Year
10-Year	10%
50-Year	2%
100-Year	1%
500-Year	0.2%

~~The State has been affected by a number of floods over the past several years. Most notably, Hurricane Young in 1997 caused flooding that generated a Presidential Disaster Declaration for the Counties of Allwater, Bedlam, Calm-before-the-Storm, and Turmoil. The flood caused several million dollars in damages.~~

A variety of factors affect the type and severity of flooding throughout the State, including topography, urban development and infrastructure, and proximity to the coastline.

Riverine Flooding

Mountain Region (Allwater, Bedlam, Calm-before-the-Storm, and Turmoil Counties)

Flooding in the Mountain Region is characterized by high-velocity waters flowing to the valleys. During heavy rains from storm systems, including severe thunderstorms and tropical storms, water flows down from the mountain, collecting in, then overtopping, valley streams and rivers. The steep slopes of the region induce high velocities as the water flows downhill and downstream, in many cases producing flash flooding conditions. Because some towns in the Mountain Region have the majority of the corporate limits located in the valley and, therefore, often in the floodplain, flood waters have the potential to affect or even severely harm whole towns. Because of the steep topography, developable areas of the town are within the 100-year floodplain, and some are affected by 10- and 50-year floods. These conditions, especially in areas where flash floods are a problem, make response operations and evacuation very difficult, adversely affecting the safety of the residents.

These flash flooding response and evacuation problems were illustrated in Bedlam County during the summer of 1999. The passage of Tropical Storm Zoe created flash flooding in the towns of Chaos and Pandemonium. While the floodwaters only reached an estimated 10-year flood elevation, the sudden onset of the flood and swift waters did not allow warning to the residents and, consequently, a driver attempting to drive through waters that had overtopped a secondary road was swept away by the waters. Furthermore, about 10 homes in Chaos and 15 homes in Pandemonium were flooded, creating an estimated \$100,000 in damages (see Appendix XX for a detailed history of floods in this area).

ASSESSING VULNERABILITY BY JURISDICTION

Requirement §201.4(c)(2)(ii): [The State risk assessment shall include an] overview and analysis of the State's vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in local risk assessments The State shall describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events

Update:

§201.4(d): **Plan must be reviewed and revised to reflect changes in development...**

Explanation: The plan **shall** describe which jurisdictions are most threatened and vulnerable to hazards and the process used to identify them. Identification of these jurisdictions **shall** be based on an analysis of available local risk assessments conducted throughout the State, and where not available, on State risk assessments.

Plan Update: The State **shall** describe, as appropriate, any changes, clarifications, or refinements to the previous overview of the State's vulnerability resulting from any new or updated data as well as information generated through local mitigation plans.

The update **must** explain the process used to analyze information from the local risk assessments and adjust the statewide risk assessment, as necessary. Recognizing the differences in local risk assessments, information from local mitigation plans allows the State to better understand or describe its vulnerability in terms of the jurisdictions most threatened by natural hazards. However, the update should not attempt to include the details provided in every local mitigation plan.

The State **must** consider in its assessment, for jurisdictions in hazard prone areas, changes in development such as:

- Significant population increases;
- Intensification of land use; and/or
- Substantial new development or redevelopment.

Changes in development patterns are relative to the existing built environment. It is up to the State to determine what constitutes significant development, taking into account economic, social, and environmental factors.

Special Considerations: Although the Rule requires that States only discuss vulnerability in terms of structures, States are highly encouraged to consider vulnerable populations, in particular the elderly, disabled, and low income.

Resource:

For an explanation on ways to determine what areas are the most vulnerable to damage and loss, see:

- ✓ *Understanding Your Risks* (FEMA 386-2), Steps 3 and 4.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 2.
- ✓ HAZUS-MH at www.fema.gov/HAZUS/.

Examples:



Original Submittal:

[For illustrative purposes, only the flood hazard vulnerability is included in this example.]

Flood Hazard Vulnerability

As development has increased in and along floodplains, urban and suburban areas of the State have been increasingly impacted by flash flooding and flooding along streams and rivers. Across the State, an estimated 1.5 million people live within areas designated as 100-year floodplains.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(2) (ii)		<ul style="list-style-type: none"> ▪ The plan did not differentiate areas of the State that have greater vulnerability to flooding than others.

Required Revisions:

For a “Satisfactory” score, the plan must detail the factors determining vulnerability to the State. While not required by the Rule, the plan should provide information at the local/County level to the extent possible, allowing the State to contrast areas of higher and lower vulnerability.



Revised Submittal:

Flood Hazard Vulnerability

~~As development has increased in and along floodplains, urban and suburban areas of the State have been increasingly impacted by flash flooding and flooding along streams and rivers. Across the State, an estimated 1.5 million people live within areas designated as 100-year floodplains.~~

The State Department of the Environment used GIS technology to overlay aerial photographs with the 100-year floodplain. The Department determined that some Counties have a higher percentage of structures located within the 100-year floodplain, and therefore have a higher vulnerability to the flooding hazard than

other Counties. In addition, using FIRMs, FISs, and topographic mapping, the Department identified areas where steep slopes could increase flood velocity. By reviewing the flood hazard assessments provided in local mitigation plans (including FMA and CRS plans), the HMC identified exacerbating circumstances that may lead to greater flood vulnerability, including stormwater management issues and a high percentage of impervious surfaces in or near the floodplain. A detailed analysis of the flood hazard and related map are provided for each County of the State in Appendix XX. The following table summarizes flood attributes by County.

Table XX: Flood Vulnerability by County

County	% of Structures in Floodplain	Steep Slopes/High Velocity Water	Stormwater Management Issues ¹	Impervious Surfaces ²	Estimated No. of People Affected	Assessed Relative Vulnerability	No. of Critical Facilities Affected
Allwater	50%	●			12,000	H	4
Bedlam	4%	●			1,000	L	1
Calm-before-the-Storm	10%	●			3,000	M	3
Turmoil	1%		●	15%	2,000	M	1

¹**Stormwater Management Issues** encompass assessments by local governments, such as debris in stormwater collectors, culvert sizes, etc. that lead to increased localized flooding during heavy rains.

²**Impervious Surfaces** describe the percentage of acres of paved surfaces in or near floodplains.

ASSESSING VULNERABILITY OF STATE FACILITIES

Requirement §201.4(c)(2)(ii): [The State risk assessment shall include an overview and analysis of the State’s vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in] the State risk assessment. ... State owned critical or operated facilities located in the identified hazard areas shall also be addressed

Explanation: The plan **shall** describe the State-owned or operated buildings, infrastructure, and critical facilities located in areas subject to hazards described previously. The description *should* include the uses, approximate sizes, types, and values of buildings, infrastructure, and critical facilities.

Plan Update: The State **shall** update the overview and analysis of vulnerable State owned or operated buildings, critical facilities, and infrastructure, based on available data. The update *should* reflect acquisition or development of new properties and infrastructure and the disposition of properties no longer owned or operated by the State.

Resource: For an explanation on ways to determine what areas are at risk and vulnerable, see:

- ✓ *Understanding Your Risks* (FEMA 386-2), Steps 3 and 4.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 2.
- ✓ HAZUS-MH at www.fema.gov/HAZUS/.

Examples:



Original Submittal:

Vulnerable State Facilities

Using FIRMs, the Hazard Mitigation Committee (HMC) ascertained that three State facilities are located in the floodplain.

REVIEWER’S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER’S COMMENTS
§201.4(c)(2)(ii)		<ul style="list-style-type: none"> ▪ The plan does not provide an analysis of the vulnerability of these facilities in the floodplain.

Required Revisions:

For a “Satisfactory” score, the plan must document the process by which the State developed its vulnerability assessment for State facilities and also provide enough detail of the findings to make the relative vulnerability of the structures evident. While not required by the Rule, the analysis should include an assessment of the facilities’ first floor elevations in relation to the base flood elevation, an indication of the value of the buildings and contents, and a description of the buildings’ functions and how the buildings’ functions would be compromised if flooded.



Revised Submittal:

Vulnerable Vulnerability of State Facilities to Flooding

~~Using FIRMs, the Hazard Mitigation Committee (HMC) ascertained that three State facilities are located in the floodplain.~~

At the request of the Hazard Mitigation Committee (HMC), surveyors and engineers from the State Department of the Environment and the Department of Public Works conducted site assessments of all State facilities located within the 100-year floodplain to determine their vulnerability to flooding. First floor elevations, construction types, square footages, content types, and approximate value of the structures and contents were documented for each facility. The table below summarizes these findings, including the location, function, approximate value of the structure and its contents, and the number of feet above or below base flood elevation.

Approximate values of structure and contents were estimated using the judgment of the facilities managers of the respective structures and following the guidelines detailed in the FEMA document, *Understanding Your Risks: Identifying Hazards and Estimating Losses, Step 4*. A detailed list of these findings can be found in Appendix XX.

Table XX: State Facilities in the 100-Year Floodplain

County	Function	No. of Affected State Employees	Approx. Value of Structure	Approx. Value of Contents	First Floor Elevation Above (+) or Below (-) BFE	Critical Facility
Allwater	Offices	250	\$1M	\$1M	+5	●
Bedlam	State Emergency Operations Center	50	\$1M	\$1.5M	+3	●
Calm-before-the-Storm	Warehouse/Garage for Snow Removal Equipment	15	\$1M	\$1.5M	-2	●

ESTIMATING POTENTIAL LOSSES BY JURISDICTION

Requirement §201.4(c)(2)(iii):	[The State risk assessment shall include an] overview and analysis of potential losses to identified vulnerable structures, based on estimates provided in local risk assessments
Update: §201.4(d):	Plan must be reviewed and revised to reflect changes in development...

Explanation: This requires States to incorporate the findings of local jurisdiction loss estimates in the State plan. The plan **shall** describe the distribution of losses across the State and *should* include specific reference to quantifying losses to local critical facilities.

Plan Update: The State **shall** incorporate any changes, clarifications, or refinements, obtained from State-wide or local loss estimates. Recognizing the differences in local risk assessments, information from local mitigation plans allows the State to better understand or describe its vulnerability in terms of the potential losses. However, the update should not attempt to include the details provided in every local mitigation plan.

Changes in development may affect the statewide loss estimate and **must** be considered in the plan update.

Special Considerations:	Although the Rule requires that States only analyze losses to structures, States are highly encouraged to analyze the potential economic and human impact each hazard would have statewide.
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- Resource:** For more information on assessing vulnerability/estimating losses, see:
- ✓ *Understanding Your Risks* (FEMA 386-2), Step 4.
 - ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 2.
 - ✓ HAZUS-MH at www.fema.gov/HAZUS/.

Examples:



Original Submittal:

[For illustrative purposes, only the flood hazard is discussed.]

Flood Vulnerability

Across the State, an estimated 150,000 people and 40,000 structures are located within the boundaries of the 100-year floodplain, putting at risk the State’s revenue of \$1 billion.

REVIEWER’S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(2)(iii)		<ul style="list-style-type: none"> ▪ The plan does not describe the State's potential losses. ▪ The plan does not explain how the State developed the loss figures.

Required Revisions:

To receive a “Satisfactory” score, the plan must provide an overview and analysis of losses to local jurisdictions. While not required by the Rule, the plan should also document how it developed its loss estimations and include information to assess relative losses across the State.



Revised Submittal:

Flood Vulnerability Potential Flood Losses by Jurisdiction

Across the State, an estimated 150,000 people and 40,000 structures are located within the boundaries of the 100-year floodplain, putting at risk the State’s revenue of \$1 billion.

The table below represents the estimated losses to residential, commercial, and critical facilities and buildings by County. The estimates were taken from local hazard mitigation plans and are added to provide an estimated total State loss for each category. Except for Allwater County, which has not updated its plan, each county determined losses using the procedures explained in the FEMA document, *Understanding Your Risks: Identifying Hazards and Estimating Losses*. The process used by the Hazard Mitigation Committee (HMC) for determining Allwater County’s potential losses is explained in the table’s footnote.

County	Estimated Residential Losses (in Millions)	Estimated Commercial Losses (in Millions)	Estimated Losses to Critical Facilities (in Millions)	Relative Losses (in Millions)
Allwater*	\$75.0	\$2.4	\$2.0	H
Bedlam	\$ 0.3	\$0.1	\$0.1	L
Calm-before-the-Storm	\$ 6.5	\$ 3.0	\$1.0	H
Turmoil	\$2.2	\$1.5	\$0.5	M

PART 1 - STANDARD STATE MITIGATION PLANS

Total Losses to State	\$84.0	\$ 7.0	\$3.6	94.6
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* Because Allwater County has not yet submitted a plan that estimates losses to residential, commercial, and critical facilities, all figures for this County were estimated by multiplying the percentage of structures in the floodplain (50% of all structures) with County economic data included in State demographic and tax information.

Estimated Residential Losses = 50% x No. of residences x median housing value.

Estimated Commercial Losses = 50% x No. of businesses x median building value x median business revenue.

Estimated Critical Facilities = 50% x No. of police and fire stations, hospitals, schools x median estimated losses to critical facilities of all other counties.

This method is not an accurate measure of vulnerability because depth of flooding for each structure in the floodplain was not assessed.

ESTIMATING POTENTIAL LOSSES OF STATE FACILITIES

Requirement §201.4(c)(2)(iii): [The State risk assessment shall include an overview and analysis of potential losses to identified vulnerable structures, based on estimates provided in] the State risk assessment. The State shall estimate the potential dollar losses to State-owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

Explanation: This requires States to estimate losses to State-owned or operated facilities and infrastructure. The plan **shall** describe the distribution of losses across the State, with specific reference to quantifying losses to critical facilities.

States *should* also describe their approach for determining losses for State-owned infrastructure and buildings.

Plan Update: If there are changes to the hazard profile and/or to the State facilities and infrastructure as described under Assessing Vulnerability of State Facilities, this section **must** be updated to reflect potential losses to identified vulnerable structures and infrastructure. If the approach for determining these losses has changed since the first approval, the plan *should* explain why and describe the new methodology.

Resource: For more information on assessing vulnerability/estimating losses, see:

- ✓ *Understanding Your Risks* (FEMA 386-2), Step 4.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 2.
- ✓ HAZUS-MH at www.fema.gov/HAZUS/.

Examples:



Original Submittal:

Vulnerability of State Facilities to Flood

Using FIRMs, the Hazard Mitigation Committee (HMC) ascertained that three State facilities are located in the floodplain.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(2)(iii)		<ul style="list-style-type: none"> ▪ The plan does not discuss the actual vulnerability and potential losses to the facilities in the floodplains.

Required Revisions:

The plan must make clear the potential losses to State facilities and infrastructure. These losses should be estimated as a function of the vulnerability to the hazard (here, flood depth), with potential losses

calculated based on the estimated value of the structure.



Revised Submittal:

Vulnerability of State Facilities to Flood Potential Flood Losses to State Facilities

~~Using FIRMs, the (Hazard Mitigation Committee) (HMC) ascertained that three State facilities are located in the floodplain.~~

Using the procedure detailed in the FEMA document, *Understanding Your Risks*, to determine the estimated percentage loss to structure and contents, the HMC determined that the warehouse/garage housing snow removal supplies and equipment was the only critical facility in the floodplain that would suffer damages in a 100-year flood event. The facility would suffer approximately \$422,500 in losses to the structure and its contents.

Location of State Facility	Function	No. of Critical Facility	Approx. Value of Structure	Approx. Value of Contents	First Floor Elevation Above (+) or Below (-) BFE*	Estimated % Loss to Structure	Estimated % Loss to Contents	Estimated Structure Losses	Estimated Content Losses	Relative Losses
Allwater	Offices		\$1M	\$1M	+5	0%	0%	\$0	\$0	L
Bedlam	State Emergency Operations Ctr.	1	\$1M	\$1M	+3	0%	0%	\$0	\$0	L
Calm-before-the-Storm	Warehouse/ Garage for Snow Removal Equipment	1	\$1M	\$1.5 M	-2	13%	19.5%	\$130K	\$292.5K	H
Total Losses to State Critical Facilities								\$130K	\$292.5K	

*BFE: Based Flood Elevation

MITIGATION STRATEGY

According to §201.4(c)(3) the plan must include a mitigation strategy that provides the State's blueprint for reducing the losses identified in the risk assessment. The strategy shall include goals that are based on the risk assessment and that should be consistent with goals from other State and local jurisdictions' plans and policies. While not required by the Rule, objectives could also be included to define strategies or steps to achieve the identified goals. These goals and objectives will guide the State's strategies and selection of actions to achieve the desired, long-term hazard protection. The State must also assess its own as well as its local jurisdictions' capabilities to staff programs or projects and fund actions to achieve the goals of the plan. The State must also identify funding from Federal, local, and private sources to complement its own resources.

Section 201.4(d) requires that plans be reviewed and revised to reflect progress in statewide mitigation efforts and changes in priorities. This is reflected in the guidance language under §201.4(c)(3)(i) and §201.4(c)(3)(iii). Fundamental to the mitigation strategy update is the demonstration that progress has been made within the previous three years to reduce losses identified in the previously approved plan. The updated mitigation strategy provides an opportunity for the State to discuss efforts to ensure consistency between the goals and policies of the State plan, and those of the local plans that have been approved in the last three years.

This section includes the following five subsections:

- Hazard Mitigation Goals
- State Capability Assessment
- Local Capability Assessment
- Mitigation Actions
- Funding Sources

HAZARD MITIGATION GOALS

Requirement §201.4(c)(3)(i): [The State mitigation strategy shall include a] description of State goals to guide the selection of activities to mitigate and reduce potential losses.

Update: §201.4(d): [The] plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts and changes in priorities...

Explanation: The State's goals as written in the plan reflect the State's vision for long-term hazard mitigation and loss reduction. This section *should* describe how the plan's goals were developed.

These goals, along with their corresponding objectives, guide the development and implementation of mitigation actions. Although the Rule does not require a description of objectives, States are highly encouraged to include a description of the objectives developed to achieve the goals so that reviewers understand the connection between goals, objectives, and actions.

The goals and objectives *should*:

- Be based on the findings of the local and State risk assessments.
- Represent a long-term vision for hazard reduction or enhancement of mitigation capabilities.

Plan Update: The plan update provides an opportunity for the State to reconsider the goals and objectives adopted in the previously approved plan to guide the selection of activities to mitigate and reduce potential losses. Goals may be reaffirmed or updated based on more current information, including updated or new risk assessments or changes in State mitigation priorities. It is not necessary to change previous goals if they remain valid but the plan **must** demonstrate that State goals were assessed and that they still remain valid.

If the previously approved plan included objectives, the updated plan *should* point out which objectives have been met and identify new objectives.

Resources: For more information on identifying and refining the State's mitigation goals and objectives, see:

- ✓ *Developing the Mitigation Plan (FEMA 386-3)*, Step 1.

Special Considerations: **Goals** are general guidelines that explain what you want to achieve. They are usually long-term and represent global visions such as "eliminate flood damage."

Objectives define strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific, measurable, and may have a defined completion date. Objectives are more specific, such

as “upgrade State building code to meet the provisions of the National Earthquake Hazards Reduction Program.”
 (From *Developing the Mitigation Plan (FEMA 386-3)*, Step 1.)

Examples:



Original Submittal:

The Hazard Mitigation Committee (HMC) identified the following goals for the plan:

- Goal 1: Document the hazards and vulnerabilities in the State.
- Goal 2: Identify priority mitigation projects to fund.
- Goal 3: Raise awareness of hazards and mitigation actions in the State.

R E V I E W E R ’ S C O M M E N T S

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(3) (i)		<ul style="list-style-type: none"> ▪ Goals 1 and 2 are what is to be accomplished by the planning process. ▪ No explanation is provided for how the goals were developed.

Required Revisions:

To receive a “Satisfactory” score, the plan must tie the goals to the risk assessment findings.



Revised Submittal:

~~The Hazard Mitigation Committee (HMC) identified the following goals for the plan:~~

- ~~Goal 1: Document the hazards and vulnerabilities in the State.~~
- ~~Goal 2: Identify priority mitigation projects to fund.~~
- ~~Goal 3: Raise awareness of hazards and mitigation actions in the State.~~

The Hazard Mitigation Committee (HMC) participated in a 2-day workshop to review the risk assessment findings and develop the mitigation goals and objectives for the Hazard Mitigation Plan. The risk assessment identified the following problems:

- **Local communities in the State were unaware of the types of assistance available to them for hazard mitigation planning.**
- **The State Division of Emergency Management often did not coordinate with local communities or other State agencies in hazard mitigation planning.**

- Many State residents did not realize hazard mitigation planning was occurring in their area.
- The State would benefit from incorporating GIS and other technical information into their hazard mitigation planning process.
- The State has one of the highest numbers of repetitive loss properties in the country.

At the end of this session, the HMC identified the following goals, objectives, and actions for the State of Emergency’s mitigation strategy to address these issues.

Goal 1: Strengthen the Division of Emergency Management’s capability and its coordination with other State agencies to reduce hazard vulnerabilities throughout the State.

Goal 2: Increase technical assistance to and coordination with local jurisdictions to build local capacity to further reduce vulnerabilities at the local level.

Goal 3: Build public awareness of proven, cost-effective mitigation actions.

Goal 4: Formulate strategies using state-of-the-art knowledge to reduce vulnerabilities for identified hazards.

Goal 5: Reduce the number of repetitive loss structures by 50%.

(For the purposes of this example, the following description applies to all hazards. For illustrative purposes, only one goal will be described in more detail.)

Goal 2: Increase technical assistance to and coordination with local jurisdictions to build local capacity to further reduce vulnerabilities at the local level.

Objectives 2.1: The State will work with local communities to improve their hazard mitigation planning process.

Short Term Action 2.2.1:

Note: “short term” is defined as those actions which agencies are capable of implementing within their existing resources and authorities in the current fiscal cycle.

Improve hazard mitigation technical assistance for local governments.

Lead Agency: State Office of Emergency Management

Support Agency: State Department of the Environment

Timeline: 1 year

Resources: 1 Full Time Employee

Long Term Action 2.2.2:

Note: "long term" is defined as those actions which will require new or additional resources or authorities to implement, and those actions which cannot occur during the current fiscal cycle.

The State will develop and distribute local hazard mitigation planning guidance.

Lead Agency: State Office of Planning

Support Agency: State Office of Emergency Management

Timeline: 3 years

Resources: 2 Full Time Employees

STATE CAPABILITY ASSESSMENT

**Requirement
§201.4(c)(3)(ii):**

[The State mitigation strategy shall include a] discussion 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 State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas [and]
- a discussion of State funding capabilities for hazard mitigation projects

Explanation:

The State **shall** include a discussion of its financial, legal, and programmatic ability to carry out mitigation actions in the pre-and post-disaster setting to achieve its mitigation objectives and, ultimately, its goals. The mitigation strategy *should* not only address the ways the State's existing capabilities can aid the mitigation effort, but also address areas in which the State needs to strengthen its capabilities. Without an assessment of the State's capability, implementation of the plan could stall from inadequate resources.

The State **shall** conduct an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas. The State *should* discuss existing and emerging State policies and programs for both pre- and post-disaster mitigation. The discussions *should* include: implementation opportunities and problems (e.g., financial/staffing resources, lack of informed public, non-mandated improvements, etc.), opportunities for improving State capabilities, conflicts created by public investment policies (e.g., policies that have promoted public investment in hazard-prone areas), and problems created by private development projects in hazard-prone areas. The State *should* highlight implementation tools, policies, and programs that have proven to be effective in achieving mitigation objectives (e.g., planning legislation requiring integration of mitigation actions in comprehensive plans). The State *should* also identify those laws, regulations, and policies that can be amended to integrate mitigation actions or to remove provisions that hinder mitigation efforts.

The State **shall** describe its assessment of its funding capabilities for hazard mitigation projects. The discussion *should* include positive aspects, as well as problems encountered, and identify areas where the State needs to seek outside funding sources.

Plan Update:

The plan update provides an opportunity for the State to reevaluate its pre-and post-disaster hazard management policies, programs, and capabilities. The plan update **must** address any hazard management capabilities of the State that have changed since approval of the previous plan.

The State **shall** also provide an updated assessment of its funding capabilities for hazard mitigation projects.

In the previously approved plan, the State may have identified laws, regulations and policies that could be amended to integrate mitigation actions or to remove provisions that hinder mitigation efforts. Where applicable, the updated plan *should* describe progress in modifying these policies and legislation or identify where opportunities for integration still remain.

Resource:

For tips for assessing mitigation capabilities, see:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 2.

Examples:



Original Submittal:

The State Mitigation Plan has identified those pre- and post-disaster State regulations, policies, and programs related to hazard mitigation.

For example, a major hazard the State faces is flooding. The State has taken steps to become more proactive in its approach to flood hazard mitigation planning. The Emergency Management Agency has instituted the Comprehensive Flood Management Grant Program and Repetitive Loss Project, while the State Department of the Environment has instituted the Technical Assistance Program. These programs are geared towards providing mitigation planning assistance to communities in the State.

The State has many funding programs in place which are available to municipalities that need assistance. These funds are primarily from various Federal grant programs.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(3) (ii)		<ul style="list-style-type: none"> ▪ The plan does not evaluate the laws, regulations, policies, and programs. ▪ The discussion on funding is too general and incomplete to address the requirement. ▪ The plan did not indicate how State programs were identified or how they were beneficial. ▪ There are no regulatory reviews or regulations indicated that might be improved for mitigation purposes. ▪ The plan does not discuss programs or policies the State can use to improve capabilities.

Required Revisions:

To receive a “Satisfactory” score, the plan must evaluate the State’s capability to reduce losses and discuss in more detail the State’s funding resources. While not required by the Rule, the plan should include what effort was made to identify programs and policies under consideration, including executive orders or new legislation needed to implement the plan recommendations.

**Revised Submittal:**

The State Mitigation Plan has identified those pre- and post-disaster State regulations, policies, and programs related to hazard mitigation. **As a result of this, the State Hazard Mitigation Committee (HMC) held several meetings with various State Agencies. Those programs selected as most beneficial are described as follows.**

~~For example, a major hazard the State faces is flooding. The State has taken steps to become more proactive in its approach to flood hazard mitigation planning. The Emergency Management Agency has instituted the Comprehensive Flood Management Grant Program and Repetitive Loss Project, while our State Department of the Environment has instituted the Technical Assistance Program. These programs are geared towards providing mitigation planning assistance to communities in the State.~~

The State Emergency Management Agency identified the Comprehensive Flood Management Grant Program and Repetitive Loss Projects as the most beneficial programs. The Comprehensive Flood Management Grant Program has allowed the State to assist communities in all aspects of floodplain management, including the development of local floodplain plans, the provision of funding for various flood control and watershed studies, and the acquisition of flood-prone properties. The Repetitive Loss Project uses GIS software to map repetitive loss structures and areas in an effort to determine which types of mitigation actions are most appropriate.

The State Department of the Environment indicated that the Technical Assistance Program has been very beneficial. The Technical Assistance Program provides help to communities on a variety of topics and acts as a clearinghouse for information on mitigation planning, including such things as providing guidance on the planning process and funding sources available to communities.

The State has many funding programs in place which are available to municipalities that need assistance. These funds are primarily from various Federal grant programs. Currently, the State uses HMGP, FMA, and Community Development Block Grants (CDBG) funds to promote mitigation activities. The State supplements these sources with funding from its State Office for Mitigation Funding and partnerships with the private sector (see Table XX for a list of projects funded by these programs).

The State Legislature recently passed the State Resource Protection and Hazard Mitigation Planning Act. This act gives the State the authority to make certain that State government activities are consistent with the policies of the State Mitigation Plan. Although this is a new act and agencies are just beginning to implement it, it is expected to have a significant positive impact on hazard mitigation planning within the State (see Section XX, Goals, for more details on the expected results of this act).

LOCAL CAPABILITY ASSESSMENT

Requirement §201.4(c)(3)(ii): [The State mitigation strategy shall include] a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

Explanation: The plan **shall** include a general description of local mitigation policies, programs, and capabilities. The State **shall** also describe how local pre- and post-disaster mitigation policies, programs, and capabilities, such as building codes, zoning, or land use policies, were evaluated to determine their effectiveness. This *should* include existing and emerging capabilities. The description can be kept general and does not need to be detailed for all localities.

The State *should* include in its description the following: implementation opportunities and problems (e.g., financial /staffing resources, lack of informed public, non-mandated improvements, etc.), opportunities for building local capabilities, and problems created by public investment policies (e.g., policies that may have inadvertently promoted public investments in hazard-prone areas). The State *should* highlight local implementation tools, policies, and programs that have proven to be effective in achieving mitigation objectives (e.g., adoption of planning legislation requiring integration of mitigation actions in comprehensive plans).

Plan Update: The updated plan **shall** include an updated general description and analysis of the effectiveness of current local mitigation policies, programs, and capabilities.

Resource: For tips on how to assess mitigation capabilities, see:
 ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 2.

Examples:



Original Submittal:

The State has a history of being a strong property rights State. Therefore, local governments have taken a longer time implementing some hazard mitigation actions. The State, however, has provided guidance to the local communities.

The mitigation actions most local governments already have in place are zoning regulations and building codes. Many local governments are currently working on adopting the most recent International Building Code (IBC) and rewriting their zoning regulations so they have more “teeth” to them to allow enforcement of the regulations.

New approaches that local governments are working on, with help from the State, are restrictive zoning, capital improvements planning, land use planning, and subdivision regulations. It is believed that local hazard mitigation will be more effective once these actions are implemented.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(3) (ii)		<ul style="list-style-type: none"> ▪ The State did not identify why the policies mentioned are believed to be beneficial to hazard mitigation. ▪ The State did not mention how they are helping the local communities to adopt the recommended policies.

Required Revisions:

To receive a "Satisfactory" score, the plan must include what effort was made to assess the effectiveness of programs and policies under consideration.



Revised Submittal:

The State Hazard Mitigation Committee (HMC) has been actively working with its local governments to identify those actions most effective for hazard mitigation planning. The State has a history of being a strong property rights State. ~~Therefore, local governments have had a longer time implementing the hazard mitigation actions, but~~ **support is growing for policies that will help with hazard mitigation. Through working with local governments, the HMC has identified policies currently in place and their effectiveness with hazard mitigation. The HMC has also identified policies that local communities are interested in adopting and how they can benefit mitigation. The State, however, has provided guidance to the local communities. The State does provide guidance to the communities by providing model ordinances and example plans, and even has funds available to communities interested in adopting hazard mitigation actions.**

~~The mitigation actions most local governments already have in place are zoning regulations and building codes. Many local governments are currently working on adopting the most recent International Building Code (IBC) and rewriting their zoning regulations so they have more "teeth" to them to allow enforcement of the regulations.~~

~~New approaches that local governments are working on, with help from the State, are restrictive zoning, capital improvements planning, land use planning, and subdivision regulations.~~

The existing and planned future policies of local governments are indicated in the following table. It is believed that local hazard mitigation will be more effective once these actions are implemented. It is expected that their implementation will make local mitigation more effective.

PART 1 - STANDARD STATE MITIGATION PLANS

Existing Local Policies			
<i>Policy</i>	<i>Description</i>	<i>Applicability</i>	<i>Effectiveness</i>
Building Codes	The State has adopted a building code and local governments are required to adopt and enforce this code.	The adoption and enforcement of building codes relates the design and construction of structures to standards established for withstanding high winds and flooding.	All structures built after 1999 comply with the new building code, which includes special provisions for building in the floodplain.
Zoning	Laws and ordinances regulate development by dividing the community into zones and by setting development criteria for each zone.	Zoning can keep inappropriate development out of hazard-prone areas and can designate certain areas for such things as conservation, public use, or agriculture. Zoning can also be used to control construction by dedicating areas for cluster development or planned unit development. The State is currently working with local governments on implementing these last two policies.	Eight out of 12 counties have passed open space ordinances that have preserved over 20% percent of hazard-prone and environmentally sensitive areas (wetlands, aquifer recharge zones, and hillsides) in the State. These ordinances are based on local land use plans.
Future Planned Local Policies			
<i>Policy</i>	<i>Description</i>	<i>Applicability</i>	<i>Effectiveness</i>
Land Use Planning	Comprehensive land use planning provides a mechanism to prevent development in hazardous areas or allows development in a manner that minimizes damage from hazards. Land use planning gives local governments "the big picture" of what is happening in their jurisdiction.	Local governments can use land use planning to identify those areas subject to damage from hazards and work to keep inappropriate development out of these areas. Land use planning can also be used for a more regional approach when local governments work together.	Under the new local planning legislation, new development can be minimized in identified hazard areas.
Subdivision Regulations	Sets construction and location standards for subdivision layout and infrastructure.	Contains standards for such things as stormwater management and erosion control.	New subdivisions in flood hazard areas will be required to cluster homes outside of the floodplain, and will be given more flexibility in using varied densities within the subdivision.
Capital Improvements Planning	Identifies where major public expenditures will be made over the next 5 to 10 years.	Capital Improvement Plans can secure hazard-prone areas for low risk uses, identify roads or utilities that need strengthening, replacement, or realignment, and can prescribe standards for the design and construction of new facilities.	Realigned utilities in highest earthquake risk area.

MITIGATION ACTIONS

Requirement §201.4(c)(3)(iii): [The State plans shall include an] identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local plans, where specific local actions and projects are identified.

Update:

§201.4(d): [The] plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts and changes in priorities....

Explanation: Based on the risk assessment portion of the plan, the State **shall** include in its statewide mitigation strategy actions it has identified through its planning process as well as those actions identified in Local Plans. The State *should* describe what agencies and interested parties were involved in identifying priorities, how actions were evaluated, and how such actions correspond to the plan's mitigation goals and objectives. Mitigation actions *should* be directly tied to goals and objectives and provide the means to achieve them. Actions can be:

- Statewide or property specific.
- Regulatory or programmatic.
- Targeted at government agencies or private industry.
- Construction activities or public outreach.

Plan Update:

The updated plan **must** identify the completed, deleted, or deferred actions or activities from the previously adopted plan as a benchmark for progress. Further, the updated plan **shall** include in its evaluation and prioritization any new mitigation actions identified since the previous plan was approved or through the plan update process.

If the mitigation actions or activities remain unchanged from the previously approved plan, the updated plan **must** indicate why changes are not necessary.

The system identified under §201.4 (c)(5)(ii) and (iii), plan maintenance, will be useful in demonstrating progress in statewide mitigation efforts.

Resources:

For more information on evaluating mitigation actions, see:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 2.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 3.

Examples:



Original Submittal:

The State has compiled a list of mitigation projects, listed here by jurisdiction.

Mitigation Projects					
Statewide or County Specific	Project Description	Hazard	Lead/Support Agency	Budget	Funding Source
State Repetitive Loss Reduction Program	Comprehensive loss reduction program involving acquisition, elevation, relocation, and floodproofing of structures	Flooding	State Dept. of Emergency/ State Dept. of Public Works/Local Planning Agencies	\$50 Million	PDM/ HMGP
Allwater County	Increase culvert size and retrofit bridge along State Highway 101	Flooding	Allwater Dept. of Highway and Safety/ State Dept. of Emergency	\$6 Million	PDM (multiple grant application cycles)
Bedlam County	Conduct site visits to determine appropriate best practices for mitigating flooding of flood- prone historic structures	Flooding	Bedlam Dept. of Historic Preservation/ Bedlam Dept. of Env.	\$35,000	Heritage Fund, Association for Historic Preservation, Bedlam Historic Society
State Coastal Zone Management Program	Review existing plans to determine effectiveness/ success of coastal erosion policies	Coastal Erosion	State Dept. of Env./State Dept. of Emergency	\$150,000	Existing budget
State Earth-quake Hazard Reduction Program	Update the State Building code to the recommended provisions of the National Earthquake Hazards Reduction Program and promote local adoption	Earth- quakes	State Dept. of Planning/ State Dept. of Emergency/ Local Planning Depts.	\$100,000	Existing Budget

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(3)(iii)		<ul style="list-style-type: none"> ▪ The plan does not describe how these projects were evaluated and selected.

		<ul style="list-style-type: none"> There is no indication as to the priority for implementing these projects.
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Required Revisions:

To receive a “Satisfactory” score, the plan must describe the approach used to evaluate and prioritize mitigation actions.



Revised Submittal:

~~The State has compiled a list of mitigation projects, listed here by jurisdiction.~~ **The Hazard Mitigation Committee (HMC) hired a consultant to assist the HMC to evaluate potential projects and prepare a capital improvement plan for mitigation actions to be carried out over the next 10 years. The consultant met with the HMC to review projects identified in local plans and by the HMC. The consultant gathered relevant structure information (e.g., replacement value, square footage, percent of damage to structure likely, etc.) and relevant hazard information (e.g., probability of occurrence, magnitude of the event at the project site, etc.) and then analyzed the costs and benefits for each project to generate a cost-benefit estimate. The summary of results is included in the plan as Appendix XX. Each project was then judged against these three criteria: cost-benefit ratios greater than 1 (all projects receiving a cost-benefit ratio less than 1 were not considered for Federal funding), social benefits (or least negative impacts) to the communities, and environmental benefits (or least negative impacts) to the communities. The table below summarizes the HMC’s findings. In cases where the probabilities, costs, or benefits were difficult to calculate due to lack of data, the HMC considered the amount of damage from past occurrences or the geographical extent of the hazard area, to assign a rank.**

Projects that had additional considerations, such as historic, environmental, or social value, while not meeting the economic criteria, have been included and indicated in the Capital Improvement Plan (CIP) with an asterisk. Funding for such projects will be pursued from private sources and State and local funds allocated whenever possible.

The State is focusing its mitigation efforts on reducing flood-related losses as a result of flooding hazards causing the highest losses of all the natural hazards in the state. One of its innovative programs is the comprehensive Repetitive Loss Reduction Program. The goal of this program is to reduce repetitive loss properties by 50% within 10 years. The state has the highest number of repetitive loss properties in the country. While the focus of mitigation efforts is flooding, the State will continue to support other hazard mitigation activities such as those under the Earthquake Hazard Reduction Program.

PART 1 - STANDARD STATE MITIGATION PLANS

Mitigation Projects									
Statewide or County Specific	Project Description	Hazard	Lead/Support Agency	Budget	Funding Source	BC Review	Negative Social Impact	Negative Environmental Impact	Rank
State Repetitive Loss Reduction Program	Comprehensive loss reduction program involving acquisition, elevation, relocation, and floodproofing of structures	Flooding	State Dept. of Emergency/ State Dept. of Public Works/Local Planning Agencies	\$50 Million	PDM/ HMGP	+	L	L	H
Allwater County	Increase culvert size and retrofit bridge along State Highway 101	Flooding	Allwater Dept. of Highway and Safety/ State Dept. of Emergency	\$6 Million	PDM (multiple grant application cycles)	+	L	M	H
Bedlam County	Conduct site visits to determine appropriate best practices for mitigating flooding of flood-prone historic structures	Flooding	Bedlam Dept. of Historic Preservation/ Bedlam Dept. of Env.	\$35,000	Heritage Fund, Association for Historic Preservation, Bedlam Historic Society	N/A	L	L	M
State Coastal Zone Management Program	Review existing plans to determine effectiveness/ success of coastal erosion policies	Coastal Erosion	State Dept. of Env./State Dept. of Emergency	\$150,000	Existing budget	N/A	L	L	M
State Earthquake Hazard Reduction Program	Update the State Building code to the recommended provisions of the National Earthquake Hazards Reduction Program and promote local adoption	Earthquakes	State Dept. of Planning/ State Dept. of Emergency/ Local Planning Depts.	\$100,000	Existing Budget	N/A	L	L	L

FUNDING SOURCES

**Requirement
§201.4(c)(3)(iv):**

[The State mitigation strategy shall include an] identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.

Explanation:

The plan **shall** describe the current funding sources as well as potential sources that will be pursued to fund proposed mitigation projects and actions. It *should* also identify where funding is required to implement a project/activity identified in the mitigation strategy. Funding alternatives **shall** include Federal, State, local, and private sources.

The description can also include novel or alternative ways to fund actions, such as:

- Combining funding from various programs to implement a mitigation project.
- Integrating mitigation actions in implementing agencies' work plans.
- Identifying mitigation opportunities that may arise during scheduled infrastructure improvements, maintenance, or replacement, or other capital improvements.
- Building partnerships with businesses and non-profits whose properties, employees, or clients may be affected by hazards.
- Combining funding from various Federal programs to fund a comprehensive plan with a mitigation component.

Plan Update:

The updated plan **must** describe current and potential sources of funding to implement mitigation activities. The updated plan **should** associate current and potential funding with identified mitigation actions in the mitigation strategy, not just a general statement of funding.

The updated plan **must** identify the sources of mitigation funding used to implement activities in the mitigation strategy since the previous plan was approved.

Resource:

For more information on funding mitigation actions, see:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 3.
- ✓ *Bringing the Plan to Life* (FEMA 386-4), Step 2.

Examples:



Original Submittal:

The State currently uses several funding sources to implement its hazard mitigation actions. Funding sources include: FEMA’s Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), HUD’s Community Development Block Grant (CDBG) via the State’s Economic and Community Development Administration, and Small Business Administration (SBA) loans. These funds are used to implement a broad range of hazard mitigation actions. The State is also planning to pursue additional funding sources.

REVIEWER’S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER’S COMMENTS
§201.4(c)(3)(iv)		<ul style="list-style-type: none"> ▪ The plan did not provide details about the funding sources and how they are used, including current funding levels, eligible types of actions, and current/past projects. ▪ The plan did not mention which future funding sources will be pursued. ▪ The plan did not mention State, local, or private funding sources.

Required Revisions:

To receive a “Satisfactory” score, the plan must include a description of State and private sector partnerships in place or describe the strategy for pursuing the private sector to take a more active role in implementing mitigation actions.



Revised Submittal:

The State currently uses several funding sources to implement its hazard mitigation actions. ~~Funding sources include: FEMA’s Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), HUD’s Community Development Block Grant (CDBG) via the State’s Economic and Community Development Administration, and Small Business Administration (SBA) loans. These funds are used to implement a broad range of hazard mitigation actions. The State is also going to pursue additional funding sources.~~ **These funds primarily come from Federal and State sources, and the State is interested in pursuing additional private sources. These sources are listed in the following table.**

PART 1 – STANDARD STATE MITIGATION PLANS

Funding Source	Description	Estimated Annual Funding
HMGP <i>Hazard Mitigation Grant Program</i>	Provides post-disaster funds to communities to help implement long-term hazard mitigation strategies.	\$15M (from three past Presidential disaster declarations)
FMA <i>Flood Mitigation Assistance Program</i>	Provides pre-disaster funds. There are three types of grants: planning grants, project grants, and technical assistance grants. Requires a 25% non-Federal match and is based on the total number of NFIP policies in the State.	\$500,000
CDBG <i>Community Development Block Grant</i>	Although this funding comes from HUD, it is made available to communities through the State Economic and Community Development Administration. The grants are used to expand affordable housing and economic opportunities, and to revitalize communities by improving community facilities and services.	\$2M
SBA <i>Small Business Administration</i>	Post-disaster low interest, long-term loans given to homeowners, renters, businesses, or private non-profit organizations. Up to 20% of the loan amount can be used for hazard mitigation actions.	\$500,000 (based on past disasters)
SOF <i>State Office for Mitigation Funding</i>	This newly created State Office was authorized by a recent act of the State Legislature. This Office will make funds available to local communities for hazard mitigation planning through an increase in the State's gasoline tax.	\$5M
Manufactured Homebuilders Association	The State is interested in forming an agreement with this association to develop an earthquake-resistant homes campaign.	In-kind services
National Association of Homebuilders	The State is pursuing a relationship with this association and is discussing how the association can assist the State in promoting construction of safe rooms.	In-kind services

COORDINATION OF LOCAL MITIGATION PLANNING

§201.4(c)(4) requires that Standard State Mitigation Plans describe the process by which they provide funding and technical assistance for the development of Local Plans. This section also requires a description of the State's processes for incorporating local planning efforts into the statewide plan and prioritizing assistance to local jurisdictions.

When the State plans were originally prepared, there were few local plans that met FEMA's planning requirements. Therefore, States had limited local information on which to base their plans. Since then, many local plans have been approved and adopted, providing States with the opportunity to better coordinate with local jurisdictions.

Section 201.4(d) requires that the State plan be updated regularly to address changes in development and mitigation priorities. This is reflected in the guidance language under §201.4(c)(4)(ii) and §201.4(c)(4)(iii).

This section includes the following three subsections:

- Local Funding and Technical Assistance
- Local Plan Integration
- Prioritizing Local Assistance

LOCAL FUNDING AND TECHNICAL ASSISTANCE

Requirement §201.4(c)(4)(i): [The section on the Coordination of Local Mitigation Planning must include a] description of the State process to support, through funding and technical assistance, the development of local mitigation plans.

Explanation: With a new requirement for local mitigation plans in DMA 2000, many communities will require additional assistance, particularly small communities without adequate resources to develop a plan. Therefore, the State **must** describe the process it has developed or will develop to provide funding and technical assistance to local jurisdictions to prepare mitigation plans. Funding sources may be Federal, State, or private (see page 1-47 of the Mitigation Strategies section).

The description *should* include the departments or staff responsible for providing funds, plan development assistance, and technical assistance for developing risk assessments. This description could be included as part of the goals, objectives, and actions in the Mitigation Strategy section.

Plan Update:

The updated plan **must** describe:

- The funding and technical assistance the State has provided in the past three years to assist local jurisdictions in completing approvable mitigation plans; and
- How the State will continue to provide this funding and technical assistance for new plans as well as local plan updates.

Recognizing the limitations of some States' authorities, the update *should* discuss how technical assistance will be used to improve the effectiveness of local plans, particularly those of the more vulnerable jurisdictions. Examples include but are not limited to:

- Planning workshops/training;
- Planning grant application development;
- HAZUS technical assistance;
- Improved risk assessment or hazard data;
- Extensive plan review feedback.

If disasters have occurred, particularly catastrophic ones, States *should* discuss what steps they have taken or will take to encourage affected local jurisdictions to complete or update their mitigation plans to reflect changes in vulnerability or revised State priorities.

Resource: For information about writing a detailed mitigation strategy, see:
✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 3.

Examples:



Original Submittal:

Technical Assistance to Local Jurisdictions

The Hazard Mitigation Committee (HMC) provides technical assistance for plan development to local governments if requested by the jurisdiction.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(4) (i)		<ul style="list-style-type: none"> ▪ The plan does not describe what funding support is available to local jurisdictions. ▪ The plan did not indicate how and what kind of technical assistance is provided to local governments. ▪ The plan did not indicate the staff or departments tasked with the responsibility of providing technical assistance or funding. ▪ Technical assistance should include an outreach component.

Required Revisions:

For a “Satisfactory” score, the plan must document the process followed to provide technical assistance and funding to local jurisdictions in the development of Local Plans.



Revised Submittal:

Technical Assistance to Local Jurisdictions Plan Development Assistance

The Hazard Mitigation Committee (HMC) provides technical assistance **and funding to local jurisdictions that request such assistance** for plan development ~~to local governments if requested by the jurisdiction.~~ **These resources are offered annually to local jurisdictions through a brochure indicating: 1) the types of technical assistance provided to jurisdictions (funding, planning process facilitation, risk assessment study, capability assessment study, hazard analysis, etc.); 2) the application procedure; and 3) the annual deadline for applications. Using the information presented on the submitted applications and the statewide risk assessment, the HMC prioritized jurisdictions for assistance based on 1) their vulnerability to hazards, 2) the lack of an updated hazard mitigation plan, 3) their access to geographic information systems and planning resources, and 4) the availability of local funds to conduct a planning process. The Plan Development Assistance**

PART 1 – STANDARD STATE MITIGATION PLANS

Prioritization Matrix below summarizes this process.

Funds for planning assistance come from two Federal sources—the State’s HMGP 7% planning assistance funds and the State’s Pre-Disaster Mitigation Program funds — and one State source, the State Mitigation Action Fund. As a condition of having representation on the HMC, all member agencies have the responsibility to provide expertise to the local governments approved to receive assistance.

Plan Development Assistance Prioritization Matrix

County	Drought Risk	Flood Risk	Hurricane Risk	Wildfire Risk	Updated Plan?	County GIS Dept?	County Planning Dept.?	County Funds Available	Tech. Assistance Rank
Allwater	H	H	L	H					1
Bedlam	H	M	L	H	●		●		2
Calm-before-the-Storm	M	L	H	L	●	●	●	●	4
Turmoil	L	M	H	L	●		●		3

LOCAL PLAN INTEGRATION

Requirement §201.4(c)(4)(ii): [The section on the Coordination of Local Mitigation Planning must include a] description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.

Update: §201.4(d): [The] plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Explanation: The plan **must** include a description, as well as a timeline, of the State’s approach for reviewing, coordinating, and integrating Local Plans into the statewide mitigation plan. An established process will streamline the review and approval of Local Plans, coordinate local and State planning efforts, and create a common knowledge base. While not required by the Rule, FEMA recommends listing the offices or departments responsible for these activities.

Plan Update: The plan update process provides the opportunity for the State to assess how it reviews local plans and adjust for any challenges or constraints to implementing its review process. The plan update **must** describe the process and timeframe by which the State reviews new and updated local plans for compliance with the Local Mitigation Plan requirements under 44 CFR Part 201.6.

The plan update **must** describe the process by which the State coordinates local plans, particularly where vulnerability to hazards crosses jurisdictional lines or where multi-jurisdictional plans are being developed.

The plan update **must** describe the process by which the State links local plans to the State plan. The State plan update *should* identify areas where local jurisdictions utilized State plan information (e.g., risk assessment data) to complete their plans, or alternatively where local plan data were integrated into the State plan (e.g. local development trends). The State plan update *should* describe how the State reviewed local mitigation plans to ensure that State goals and objectives were supportive of local strategies.

Resource: For more information about writing a detailed mitigation strategy, see:
 ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 3.

Examples:

See page 1-22 for how local plan risk assessment findings, when available, were reviewed and integrated into the statewide plan.

See page 1-43 for how locally identified mitigation actions are integrated into the statewide plan.

PRIORITIZING LOCAL ASSISTANCE

Requirement
§201.4(c)(4)(iii):

[The section on the Coordination of Local Mitigation Planning must include] criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs which should include:

- consideration for communities with the highest risks,
- repetitive loss properties, and
- most intense development pressures.

Further that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.

Update:

§201.4(d):

[The] plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Explanation:

The plan **shall** describe the criteria the State has developed for prioritizing local jurisdictions to receive planning and project grant assistance. Prioritization will assist the State in targeting the most at risk communities. The criteria for selecting communities *should* include those communities that are at highest risk, have repetitive loss properties, or are facing intense development pressure. The description can also include how assisting communities with their mitigation projects will achieve the plan's goals and objectives.

For project grants, States **shall** explain how they will use benefit-cost reviews to determine which projects maximize benefits relative to their costs. These projects would have the highest priority for available funding.

Plan Update:

The State **must** evaluate its approach to prioritizing local jurisdictions to receive planning and project grant assistance and provide a current description of its process. The plan *should* identify successes and challenges in its approach.

Resource:

For more information on writing a detailed implementation strategy, see:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 3.

For information about performing benefit-cost analyses, call:

- ✓ *FEMA's BCA Hotline at 866.222.3580 to order the Mitigation BCA Toolkit (July 2003) CD.*

Examples:

See page 1-22 for how the most vulnerable jurisdictions were identified, and page 1-43 for how mitigation actions were prioritized.

PLAN MAINTENANCE PROCESS

The plan maintenance process section requires that States implement a mechanism to keep the plan updated to reflect current conditions. §201.4(c)(5) requires States to have an established method and schedule for monitoring, evaluating, and updating the plan. This includes a review of goals, objectives, and actions the State is undertaking.

The Standard State Plan must be updated and resubmitted to FEMA for approval every three years, as required in §201.4(d). While the Rule does not require the plan to be updated after a disaster declaration, FEMA highly encourages States to review it and determine if the goals, objectives, and actions still meet the needs of the State. If deemed necessary, these should be reprioritized to reflect current conditions. It is especially important to update the plan if the disaster is the result of a new hazard or is not addressed in the plan. This post-disaster update can be an annex to the plan.

The updated plan assesses how the State's plan maintenance process worked and identifies whether any changes to the process are needed. Taking into consideration future updates, the State may find that adjustments to the method and schedule for maintaining the plan are necessary to ensure its value for comprehensive risk reduction.

Since the plan is an evolving document, the plan maintenance process identified in any State plan serves as the basis for the next update. The process of updating the plan provides the State the opportunity to document its progress in achieving its mitigation goals.

This section includes the following two subsections:

- Monitoring, Evaluating, and Updating the Plan
- Monitoring Progress of Mitigation Activities

MONITORING, EVALUATING, AND UPDATING THE PLAN

**Requirement
§201.4(c)(5)(i):**

[The Standard State Plan Maintenance Process must include an] established method and schedule for monitoring, evaluating, and updating the plan.

Explanation:

The plan maintenance process provides a framework for gauging progress and adjusting to new conditions, such as new policies, Federal requirements, and new initiatives.

The State **must** describe how, when, and by whom the plan will be **monitored**. For example, its monitoring system may consist of the submittal of periodic reports by agencies involved in implementing projects or actions; site visits, phone calls, and meetings conducted by the person responsible for overseeing the plan; and the preparation of an annual report that captures the highlights of the previously mentioned activities.

The State plan **must** also include a description of how, when, and by whom it will be **evaluated**. The description *should* include the criteria used to evaluate the plan, such as whether:

- The goals and objectives still address current and expected conditions.
- The nature and magnitude of hazard problems and/or development have changed.
- The current resources are appropriate for implementing the plan.
- There are implementation problems, such as technical, political, legal, or coordination with other agencies.
- The outcomes of actions have been as expected.
- The agencies participated as originally proposed.

Ideally, the plan *should* be evaluated on an annual basis to determine the effectiveness of programs, policies, and projects, as well as to reflect changes in priorities and regulations.

The plan **must** describe how, when, and by whom it will be **updated**. FEMA recommends identifying the interested parties to be included in the process.

Plan Update:

In the previously approved plan, the State identified procedures to **monitor, evaluate, and update** its mitigation plan and track mitigation activities. The results of this evaluation and monitoring will assist the State in updating each section of the plan as part of the established update schedule. In particular, the plan maintenance section of the previously approved plan should assist in establishing the process for updating the plan.

The updated plan **must** include:

- An analysis of whether the previously approved plan’s method and schedule for monitoring, evaluating, and updating the plan worked, and what elements or processes, if any, were changed; and
- The method and schedule to be used over the next three years to monitor, evaluate, and update the plan.

Resource:

For information on the plan maintenance process, see:

- ✓ *Bringing the Plan to Life* (FEMA 386-4), Steps 2 - 4.

Examples:



Original Submittal:

The State recognizes that the Hazard Mitigation Plan is not a static document and requires regular review and evaluation. The State will review the Plan annually to ensure that the plan is being properly implemented and is achieving the objectives set forth in the plan. If necessary, the Plan will be reviewed after a disaster declaration has been made in the State. FEMA will be notified of any changes the plan, or will be given a justification of why no changes were deemed necessary.

REVIEWER’S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER’S COMMENTS
§201.4(c)(5) (i)		<ul style="list-style-type: none"> ▪ The plan does not present a schedule for monitoring, evaluating, and updating the plan, nor does it designate a responsible agency. ▪ The plan does not describe how the mitigation plan will be updated.

Required Revisions:

The plan must include a schedule or timeline for monitoring, evaluating, and updating the plan. This section must also include a description of how the plan will be updated. Include specific agencies responsible for the monitoring, evaluation, and update of the plan.



Revised Submittal:

The State recognizes that the Hazard Mitigation Plan is not a static document and requires regular review and evaluation. The State will review the Plan annually to ensure that the plan is being properly implemented and is achieving the objectives set forth in the plan. If necessary, the Plan will be reviewed after a disaster declaration has been made in the State.

The State has formed a Hazard Mitigation Plan Evaluation Committee that will be responsible for reviewing and evaluating the Mitigation Plan. This committee consists of representatives from State, County, and municipal government; regional planning councils; independent special districts; and non-profit organizations. This committee will meet once a year, in March, and all members will be asked to analyze the overall success and progress in implementing the Plan.

The committee will review each goal and objective to determine their appropriateness with respect to changing situations in the State as well as changes in policy, and to ensure they are addressing current and expected conditions. The committee will also review the risk assessment and capabilities portion of the Plan to determine if this information needs to be updated or modified. Each strategy and the associated actions will be reported on by the party responsible for its implementation, and will include which implementation processes worked well, any difficulties encountered, how coordination efforts were proceeding, and which strategies or processes need to be revised or strengthened.

The committee will then create a list of recommendations that suggests ways to bring the Plan up to date, and any enhancements that can be made. The State Office of Planning will be responsible for making the necessary changes to the Plan, and the revised Plan must be submitted for approval by the State legislature no later than three months after the conclusion of the committee meeting.

FEMA will be notified of any changes to the plan, or will be given a justification of why no changes were deemed necessary.

In the case of a disaster declaration in the State, the Hazard Mitigation Plan can be updated if the State Office of Emergency Management believes this is necessary.

MONITORING PROGRESS OF MITIGATION ACTIVITIES

<p>Requirement §201.4(c)(5)(ii) and (iii):</p>	<p>[The Standard State Plan Maintenance Process must include a]</p> <ul style="list-style-type: none"> ▪ system for monitoring implementation of mitigation measures and project closeouts. ▪ system for reviewing progress on achieving goals as well as activities and projects in the Mitigation Strategy.
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Explanation:

The plan **must** describe the State’s monitoring system for tracking the initiation and status of projects as well as project closeouts, indicating who will be responsible for implementing and maintaining this system. This is important because without regular monitoring, mitigation actions may not be implemented as planned.

The plan **must** also describe how the State reviews the progress made on actions and projects and how well these contribute to achieving the plan’s goals. The description **must** also include who is involved in the review and what the timeframe is for carrying out the review.

Plan Update:

The update **must**:

- Describe any modifications to the State’s system used to track the initiation, status, and completion of mitigation activities;
- Discuss if mitigation actions were implemented as planned; and
- Indicate who will be responsible for continued management and maintenance of the monitoring system, including the timeframe for carrying out future reviews.

The system identified in this section of the plan will support demonstration of progress in statewide mitigation efforts under §201.4 (c)(3)(iii).

The update *should*:

- Describe any challenges that hindered implementation of mitigation measures and project close-outs and how these will be dealt with in the future. These could include technical, political, financial, legal, or agency coordination issues; and
- Describe any factors that contributed to successful implementation of mitigation measures.

Resource:

For information on the plan maintenance process, see:
 ✓ *Bringing the Plan to Life* (FEMA 386-4), Steps 3 and 4.

Examples:



Original Submittal:

Mitigation Division staff are responsible for the monitoring and tracking of progress of mitigation actions. The Division has an established

quantifiable approach for measuring outcomes.

REVIEWER'S COMMENTS

RULE SECTION	LOCATION IN THE PLAN	REVIEWER'S COMMENTS
§201.4(c)(5) (ii) and (iii)		<ul style="list-style-type: none"> ▪ While the plan indicates who is responsible for monitoring progress, the plan does not describe the approach being used. ▪ The plan does not describe the Division's approach for measuring outcomes nor how these are tied to the plan's overall goals.

Required Revisions:

To receive a "Satisfactory" score, the State must set up a schedule and assign responsibility and resources for monitoring and evaluating mitigation actions and project close-outs as well as progress on goals and projects. While not required by the Rule, special attention should also be given as to when baseline data would be updated to keep the plan current.



Revised Submittal:

Mitigation Division staff are responsible for the monitoring and tracking of progress of mitigation actions. ~~The Division has an established quantifiable approach for measuring outcomes.~~ **The Division chief has assigned one person to follow-up with other agency staff on a quarterly basis. The person collects quarterly reports on measurable outcomes, which are then input into a database accessible to all participating agencies. Once a year these staff meet to review overall progress on achieving the plan's goals. This team has developed an evaluation form (see Appendix XX) that addresses outcomes or the success of projects; assesses new information provided through research and disaster assessment reports to update the baseline data; verifies project close-outs; and reviews the level of coordination among agencies, a key to the success in implementing the plan. A subcommittee of State University professors convenes once a year to review the new information and make recommendations to the HMC for updating the baseline data used in the risk analysis. This information is used to reassess project prioritization as necessary.**

Goals, objectives, and projects will be reviewed in the event of a disaster to determine whether they need to be modified to reflect the new conditions and the findings appended to the existing plan.

PART 1 - STANDARD STATE MITIGATION PLANS

The Mitigation Division regularly updates the State mitigation Web site with mitigation actions that have been successfully completed.