

FEMA REGION III

HAZARD MITIGATION PLAN GUIDANCE

Scope of Work Development



FEMA

OVERVIEW

The first step to update your community's Hazard Mitigation Plan (HMP) is developing a scope of work (SOW) for the Plan Update process. This is true whether or not you intend to apply for a FEMA Hazard Mitigation Assistance (HMA) grant to support the planning process. Your Plan Update path will be clearer if you have identified all needed SOW elements in advance.

To help you develop your Plan Update SOW, this document provides:

- Helpful Terms
- Key Decisions and related questions to help you decide what makes sense for the Plan Update SOW
- Activities that will help develop the SOW
- Sample language to use in the SOW
- A checklist for requesting technical assistance from your State and FEMA Region III to help you produce the SOW as well as develop the Plan Update and implement mitigation actions

This guidance is organized by the four main phases of hazard mitigation planning:



Planning Process



Risk Assessment



Mitigation Strategy



Plan Adoption, Maintenance, and Implementation

ICONS

Throughout this document, you will find helpful tips and other notes using the following icons to help you navigate this process.

	HELPFUL HINTS AND TIPS
	DIFFERENCE-MAKERS
	NAVIGATING THIS GUIDANCE DOCUMENT
	CONNECTIONS TO FLOOD HAZARD CONSIDERATIONS

HELPFUL TERMS

Plan Owner: the entity sponsoring development of a Plan Update including counties, Planning District Commissions, or Planning and Development Councils for multi-jurisdictional HMPs; and individual communities or Disaster-Resistant Universities (DRUs) for single-jurisdictional HMPs.



This document assumes the reader is a representative of the Plan Owner and is responsible for developing the SOW.

Participating Jurisdiction: any eligible incorporated jurisdiction or public entity (e.g., a college or university) that is engaged throughout the planning process and intends to formally adopt the Plan Update. For a single-jurisdictional HMP, the Participating Jurisdiction is also the Plan Owner. For multi-jurisdictional HMPs, the Plan Owner may also be a Participating Jurisdiction.

Planning Team: elected and appointed officials, public agency staff, representatives of community private sector and non-profit organizations, concerned citizens, etc. that represent Participating Jurisdictions and the community at large.

Plan Developer: designated point-of-contact for a Participating Jurisdiction working with the Plan Owner and Planning Consultant (if applicable) and supporting efforts of their Planning Team.



There are options for how Plan Developer(s) may be identified and defined for your particular Plan Update. See “Planning Process” for more information.

Planning Consultant: private planning consultants, academic institutions, or non-profit organizations that work under contract to the Plan Owner to provide comprehensive or selected professional and technical support for developing a Plan Update.

CHECKLIST

This guidance includes several questions to consider while developing your SOW. The questions include checkbox choices for answers with instructions for how to proceed depending on your choice:

- ☐ YES
- ☐ NO
- ☐ I Don’t Know (IDK)

At the end of this guidance document is a checklist to use while reviewing this guidance and starting to develop your SOW. The intent is to help the State and FEMA Region III understand if you would benefit from targeted technical assistance while you are developing your SOW.



Remember that you are only developing an SOW for the Plan Update at this point. Getting a firm grasp on the issues to be addressed in the Plan Update and the detailed information available to support that effort now will help you as the Plan Owner as well as the Plan Developers, Participating Jurisdictions, Planning Consultants, the State, and FEMA Region III understand what you intend to accomplish.



There are limits to the time and resources at your disposal prior to undertaking the Plan Update and this Guidance provides options for how to develop the SOW based on your current capabilities and availability. However, many of the activities that will support the Plan Update SOW development can be accomplished while working to implement your current approved HMP.






PART 1: PLANNING PROCESS

KEY DECISION #1.1: WHICH JURISDICTIONS ARE GOING TO PARTICIPATE IN THE PLANNING PROCESS?

1.1.1 Assuming a multi-jurisdictional HMP, are all eligible jurisdictions planning to participate?

- ☐ YES  See **SAMPLE LANGUAGE** for how to include this information in the SOW and proceed to Question 1.1.2
- ☐ NO  Contact eligible jurisdictions (see **ACTIVITIES**)
- Or
- Use the **TECHNICAL ASSISTANCE (TA) CHECKLIST** to request assistance from the State and FEMA Region III to help engage all eligible jurisdictions before completing the SOW

1.1.2 Are any of the Participating Jurisdictions already included in the National Flood Insurance Program (NFIP) Community Rating System (CRS) or intend to join in the near future?



- ☐ YES  See **SAMPLE LANGUAGE** for how to include this information in the SOW and proceed to Question 1.1.3.
- ☐ NO  Nothing needs to be added to the SOW; proceed to Question 1.1.3
- ☐ IDK  Contact Participating Jurisdictions and ask about CRS (see **ACTIVITIES**)
- or
- Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in identifying any Participating Jurisdictions that may be CRS communities before completing the SOW



Credits for CRS Flood Mitigation Plans include specific requirements for Activity 510 community outreach and mapping credit that can be incorporated into the Plan Update process with a little advance planning.

1.1.3 Have you secured Letters of Agreement with all Participating Jurisdictions? These letters, signed by appropriate officials, provide upfront indications for specific contributions needed from the Participating Jurisdictions to support the Plan Update process. These letters typically include (but are not limited to) commitments by the Participating Jurisdictions to:

- Maintain a Point-of-Contact (POC)
- Provide information when requested
- Attend all meetings
- Provide timely comments for all milestone reviews
- Adopt the final draft Plan Update by formal resolution

- ☐ YES  See **SAMPLE LANGUAGE** for how to include this information in the SOW
- ☐ NO  Use the **TA CHECKLIST** to request example language for Letters of Agreement from the State and FEMA Region III and circulate to the Participating Jurisdictions for signature before completing the SOW



Upfront agreements about which eligible jurisdictions will participate and how will help clear the path and ensure meaningful contributions from Participating Jurisdictions during the Plan Update process.



ACTIVITIES to Help Resolve Key Decision #1.1

Contact representatives for all eligible jurisdictions by one or a combination of the following:

1. Include as part of annual meetings held to implement the current approved HMP
2. Add an agenda item to a regularly scheduled meeting that already includes representatives of all eligible jurisdictions
3. Schedule a meeting or webinar
4. Make a direct one-on-one contact

Regardless of how you make contact, the intent is to:

- Introduce the Plan Update project
- Review general requirements and timeline
- Identify any concerns or questions
- Solicit involvement by the jurisdictions both for development of the SOW and the Plan Update
- Identify POCs for each jurisdiction going forward



COST IMPLICATIONS for Key Decision #1.1

Generally, the cost of a Plan Update increases with the number of Participating Jurisdictions. Key Decisions 1.2, 1.3, and 1.4 identify options for reducing the cost of a Plan Update with multiple jurisdictions. However, for this Key Decision, there is no advantage to not including all eligible jurisdictions in the Planning Process.



SAMPLE LANGUAGE for Key Decision #1.1 in the SOW

When you can answer “YES” to questions 1.1.1 and 1.1.3 and either “YES” or “NO” to Question 1.1.2, the following language should be inserted in the SOW:

PLANNING PROCESS

As part of the **[insert year]** All Hazard Mitigation Plan Update, the **[Plan Owner]** will be joined by the following Participating Jurisdictions:

Insert a roster of the Participating Jurisdictions

OPTIONAL (if the answer to Question 1.1.2 is YES): Indicate which Participating Jurisdictions are CRS communities in the roster and those that wish to join during the lifetime of the Plan Update

OPTIONAL (or save for future reference): Include designated POCs for each Participating Jurisdiction

As detailed in the attached Letters of Agreement, each Participating Jurisdiction will:

- Maintain a POC for interactions with the Plan Developer
- Provide information as requested by the Plan Developer
- Attend all Planning Committee meetings
- Provide timely comments for all milestone reviews
- Adopt the final draft Plan Update by formal resolution

KEY DECISION #1.2: WHO WILL BE THE PLAN DEVELOPER?

1.2.1 Will each Participating Jurisdiction provide an individual to serve as a Plan Developer in support of the Plan Update process for their jurisdiction?



“YES” implies that each Participating Jurisdiction will also be able to form and sustain involvement for a separate Planning Committee.

“NO” indicates that the Plan Owner will form a joint Planning Committee with representatives from each Participating Jurisdiction.

See Key Decision 1.3 for questions regarding who will represent the Participating Jurisdictions, regardless of how Planning Committees are organized.

- | | | | |
|--------------------------|-----|--|---|
| <input type="checkbox"/> | YES | | See Option 1.2-A in the SAMPLE LANGUAGE for how to include in the SOW, skip Question 1.2.2, and proceed to Question 1.2.3 |
| <input type="checkbox"/> | NO | | It is assumed the Participating Jurisdictions will require support from an overall project Plan Developer; an individual to be provided by the Plan Owner. Proceed to Question 1.2.2 |
| <input type="checkbox"/> | IDK | | Contact Participating Jurisdictions and see if they can identify Plan Developer candidates (and are willing and able to establish their own Planning Committees) (see “ ACTIVITIES ”).

and/or

Use the TA CHECKLIST to request assistance from the State and FEMA Region III in clarifying the roles and responsibilities of Plan Developers at the Participating Jurisdiction versus Plan Owner levels before resolving this issue with the Participating Jurisdictions and completing the SOW. |





There may be an opportunity for a hybrid arrangement where some Participating Jurisdictions have the capacity to handle the process and others do not. There is no sample language provided for this situation, but the State and FEMA Region III can help with how to include this in the SOW if needed.

1.2.2 If the answer to Question 1.2.1 is “NO,” the Plan Owner will need to provide an overall project Plan Developer. This individual will function as a coordinator of the entire Planning Process for all Participating Jurisdictions. If this position is filled by a staff member from the Plan Owner, the responsibilities may also include managing support provided by a Planning Consultant.

Can you identify a candidate staff member already working for the Plan Owner who can fill this role?




- | | | | |
|--------------------------|-----|--|--|
| <input type="checkbox"/> | YES | | See Option 1.2-B in the SAMPLE LANGUAGE for how to include in the SOW and proceed to Question 1.2.3 |
|--------------------------|-----|--|--|

- ☐ NO  In this case, it is assumed the Plan Owner will solicit and hire a Planning Consultant to serve as the Plan Developer. See Option 1.2-C in the **SAMPLE LANGUAGE** for how to include in the SOW and skip Question 1.2.3.
- If necessary, use the **TA CHECKLIST** to request assistance from the State and FEMA Region III clarifying the roles and responsibilities and/or securing the services of a Planning Consultant.
- ☐ IDK  Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in clarifying the roles and responsibilities of an overall Plan Developer at the Plan Owner level before completing the SOW.



If a Planning Consultant is the preferred option for the Plan Developer, the Plan Owner will still need to identify a staff member for overall coordination of the Plan Update and oversight for a contracted Planning Consultant.

1.2.3 When the answer to either Questions 1.2.1 or 1.2.2 is “YES,” this indicates that a representative of the Participating Jurisdictions and/or the Plan Owner will function as Plan Developer. However, will the Plan Owner also solicit and hire a Planning Consultant to provide technical support?

- ☐ YES  See Options 1.2-A (Participating Jurisdictions providing Plan Developer) or 1.2-B (Plan Owner providing Plan Developer) in the **SAMPLE LANGUAGE** for how to include in the SOW.
- ☐ NO  Nothing needs to be added to the SOW.
- ☐ IDK  Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in clarifying the roles and responsibilities and/or securing the services of a Planning Consultant before completing the SOW.



The recommended relationship with a Planning Consultant is to secure technical and document production support, in particular for the Risk Assessment and Mitigation Strategy, but responsibility for interactions with community partners should be retained by the Plan Owner and the Participating Jurisdictions to the fullest extent practical.



ACTIVITIES to Help Resolve Key Decision #1.2

Include Question 1.2.1 as part of the discussion held to address Key Decision #1.1 and/or as a follow-up discussion with Participating Jurisdictions’ POCs. The discussion should include a quick review of what a Plan Developer’s role at the Participating Jurisdiction level would involve, including (but not limited to):

- Organize a Participating Jurisdiction Planning Committee (see Key Decision #1.3)
- Prepare for and conduct regular (e.g., monthly) meetings of the Participating Jurisdiction’s Planning Committee using materials to be provided by the Plan Owner and/or Planning Consultant
- Conduct community engagement opportunities (see Key Decision #1.4)
- Contribute to the production of all milestone documents using templates to be provided by the Plan Owner and/or Planning Consultant and the input of the Participating Jurisdiction’s Planning Committee
- Ensure reviews of all milestone documents by the Participating Jurisdiction’s Planning Committee
- Ensure adoption of the final draft Plan Update by the Participating Jurisdiction’s governing body

Cost Implications for Key Decision #1.2

Similar to Key Decision #1.1, the cost of the Plan Update related to the Plan Developer efforts generally increases with the number of Participating Jurisdictions and the level of participation.

If a Planning Consultant is engaged as an overall project Plan Developer with full responsibilities for handling all interactions with all Participating Jurisdictions, a high percentage of the overall project cost will be devoted to this process.

However, if this responsibility is assumed by representatives of the Participating Jurisdictions and/or the Plan Owner, the cost for this Key Decision consists of the time required by the Plan Owner and/or Participating Jurisdictions' designated existing staff members to carry out various activities with their respective Planning Committees. In this case, funds that would otherwise be spent on the Planning Consultant for overall coordination can be used to fund more extensive technical support by the Planning Consultant for the Risk Assessment and Mitigation Strategy.

For any option though, time has value. The following are some rule-of-thumb suggestions regarding potential time commitments for Plan Developers that may be useful in these discussions:

Planning Developer Task	Time Commitment
Schedule, prepare for, and conduct regular Planning Committee Meetings including preparing agendas and read-ahead materials, facilitating the meeting, and preparing follow-up materials, e.g., notes/minutes	Assuming 12 hours per meeting and 12 meetings over the course of the Plan Update = 144 hours
Prepare Draft Risk Assessment for Planning Committee review and related community outreach (not including additional time for technical support, e.g., GIS, data analysts, technical writers, etc.)	80 hours
Prepare Draft Mitigation Strategy Review for Planning Committee review and related community outreach (not including additional time for planning support, e.g., planners, technical writers, etc.)	80 hours
Prepare Draft Implementation Plan Review for Planning Committee review and related community outreach (not including additional time for planning support)	40 hours
Prepare Final Draft Plan Update Review for Planning Committee review and related community outreach (not including additional time for planning support)	40 hours
Submit and respond to State and FEMA Region III plan review comments and prepare Final Plan Update for review and adoption by the Participating Jurisdiction's governing body (not including additional time for planning support)	40 hours
Prepare for and conduct a minimum of three Community Engagement events (in addition to Planning Committee Meetings)	Assuming 16 hours per event and 3 events = 48 hours

This totals approximately 480 hours. Generally, most of the Plan Update effort occurs over twelve months. Therefore, the average commitment of time is about one working week per month for a hypothetical Plan Developer, working with a single Planning Committee.



As indicated, these hour suggestions are for the Plan Developer's interaction with one Planning Committee. If the Plan Update is conducted by a single Plan Developer with multiple Planning Committees for different Participating Jurisdictions, the hourly commitment will obviously increase. The increase may not be linear though. For example, it may be possible to conduct community engagement for multiple Participating Jurisdictions in the same time frame and some Planning Committees may be able to hold joint meetings to cover common issues. There are more permutations than can be accommodated in this type of guidance so contact the State and FEMA Region III to figure out time commitments for different Plan Developer arrangements you may be considering.



SAMPLE LANGUAGE to use for Key Decision #1.2 in the SOW

Option 1.2-A: *For use if each Participating Jurisdiction will provide a Plan Developer:*

Each Participating Jurisdiction will provide a staff member to serve as their Plan Developer. The Participating Jurisdictions' Plan Developers will provide general coordination for their respective jurisdictions and will:

- Serve as point-of-contact for the [Plan Owner], who in turn will serve as the point-of-contact for the State and FEMA Region III
- Adhere to the Plan Update timeline (established by the [Plan Owner])
- Solicit members and organize the Participating Jurisdiction's Hazard Mitigation Planning Committee (Planning Committee)
- Prepare for and conduct all meetings of the Planning Committee
- Ensure community engagement opportunities are provided
- Produce all milestone Plan Update documents for review by the Planning Committee (using templates to be provided by the [Plan Owner])
- Produce draft and final Plan Update documents for review and approval by the State and FEMA Region III (to be submitted in coordination with the [Plan Owner])

OPTIONAL, if the answers to Questions 1.2.1 and 1.2.3 are YES, add: The Participating Jurisdictions' Plan Developers will be supported by a Planning Consultant whose services will be coordinated by the [Plan Owner].

Option 1.2-B: *For use if the Plan Owner will provide an overall project Plan Developer:*

The [Plan Owner] will provide a staff member to serve as overall Plan Developer. The [Plan Owner]'s Plan Developer will provide general coordination for all Participating Jurisdictions and will:

- Serve as point-of-contact for the State and FEMA Region III
- Establish and maintain the Plan Update timeline
- Solicit members and organize the Hazard Mitigation Planning Committee (Planning Committee)
- Prepare for and conduct all meetings of the Planning Committee
- Ensure community engagement opportunities are provided
- Produce all milestone Plan Update documents for review by the Planning Committee
- Produce draft and final Plan Update documents for review and approval by the State and FEMA Region III

OPTIONAL, if the answers to Questions 1.2.2 and 1.2.3 are YES, add: The [Plan Owner]'s Plan Developer will be supported by a Planning Consultant.

Option 1.2-C: *For use if the Plan Owner will contract with a Planning Consultant to serve as the project Plan Developer:*

The [Plan Owner] will secure the services of a Planning Consultant to serve as overall Plan Developer. The Planning Consultant / Plan Developer will provide general coordination for all Participating Jurisdictions, all in coordination with and under the supervision of the [Plan Owner]:

- Serve as point-of-contact for the State and FEMA Region III
- Establish and maintain the Plan Update timeline
- Solicit members and organize the Hazard Mitigation Planning Committee (Planning Committee)
- Prepare for and conduct all meetings of the Planning Committee
- Ensure community engagement opportunities are provided
- Produce all milestone Plan Update documents for review by the Planning Committee
- Produce draft and final Plan Update documents for review and approval by the State and FEMA Region III

KEY DECISION #1.3: WHO WILL REPRESENT THE PARTICIPATING JURISDICTIONS?




- 1.3.1** Regardless of whether a Hazard Mitigation Planning Committee will be formed for each Participating Jurisdiction or if a joint committee will be established, has each Participating Jurisdiction considered who will represent their community in the Plan Update?



The Participating Jurisdictions should already be involved in implementing the current approved HMP. The individuals, agencies, and organizations who are currently engaged are obviously good candidates for the Plan Update Planning Committee. However, it is important to continue efforts to engage as broad a cross-section of the community as possible.

Candidates include (but are not limited to):

- ✓ Individuals who have been involved in developing and implementing the current HMP
- ✓ Individuals who will be able to continue their involvement beyond the Plan Update process and contribute to implementation of mitigation action
- ✓ Individuals who are potentially impacted by hazard events
- ✓ Agencies or organizations with parallel initiatives and interests that were not well represented in the current HMP, e.g., public works departments, planning and development agencies, natural resource conservation organizations, etc.
- ✓ Potential community partners that were not well represented in the current HMP, e.g., hospitals/health sector, schools, utilities and infrastructure, big employers, small businesses, homeowner associations, non-profit organizations, etc.
- ✓ An existing committee that can be engaged to support this process

- ☐ YES  See Option 1.3-A in the **SAMPLE LANGUAGE** for how to include in the SOW.
- ☐ NO  Figuring this out may require more effort by the Participating Jurisdictions than they are willing or able to undertake before the Plan Update begins. If so, see Option 1.3-B in the **SAMPLE LANGUAGE** for how to include in the SOW.
- ☐ IDK  Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III regarding identifying and engaging potential Planning Committee members



The SOW can be written to indicate this particular decision will be made after the Plan Update is initiated. However, it needs to be written such that the State and FEMA Region III will be consulted, and their technical assistance and agreement sought regarding a proposed list of community partners.



Integrating agencies and organizations with a stake in hazard mitigation and engaging a broad range of community partners will improve the content and effectiveness of the Plan Update and support for the Plan Update implementation.



ACTIVITIES to Help Resolve Key Decision #1.3

Identify who was involved in developing the current approved HMP including those who are still involved with the maintenance and implementation of the HMP. Include the information provided above for Question 1.3.1 as part of discussions held with Participating Jurisdictions' POCs to address Key Decision #1.1.



FEMA Region III has prepared a related guidance document with additional considerations for developing an SOW when flooding is a known hazard. This document provides more detailed information for engaging participants as well as hazard profiling, identifying exposed community assets, and methodologies for assessing vulnerability and estimating losses.



COST IMPLICATIONS for Key Decision #1.3

Similar to Key Decision #1.1 and #1.2, the cost of the Plan Update related to the Participating Jurisdictions actual participation generally increases with the number of Participating Jurisdictions and the level of participation. Also in a similar manner, much of the cost implication for this Key Decision is the time required by the Plan Developer and/or Participating Jurisdictions' representatives to attend Planning Committee meetings and review milestone deliverables.

Like the Plan Developer, time has value and candidates for the Planning Committee will likely be interested in how much time may be required. The following are some rule-of-thumb suggestions regarding minimum time commitments for Planning Committee members that may be useful in these discussions:

Planning Committee Member Task	(Minimum) Time Commitment
Regularly scheduled Planning Committee Meetings including agenda review and read-ahead materials, participation in the meeting, and reviewing follow-up materials, e.g., notes/minutes	Assuming 4 hours per meeting and 12 meetings over the course of the Plan Update = 48 hours
Draft Risk Assessment Review (in addition to normal meeting preparation)	2 hours
Draft Mitigation Strategy Review (in addition to normal meeting preparation)	2 hours
Draft Implementation Plan Review (in addition to normal meeting preparation)	2 hours
Final Draft Plan Update Review (in addition to normal meeting preparation)	2 hours
Community Engagement (in addition to Planning Committee Meetings)	4 hours

This totals 60 hours. Generally, Planning Committee involvement for the Plan Update takes place over 9 to 12 months. Therefore, the average commitment of time is about one-half day per month for a typical Planning Committee member participating at minimal levels.



Planning Committee members with relevant expertise or special interests may be asked and/or elect to spend more time than these minimums.



SAMPLE LANGUAGE to use for Key Decision #1.3 in the SOW

Planning Committee members will be recruited and engaged as a joint effort of the Plan Developer and Participating Jurisdictions. The Planning Committee will meet at a minimum on a monthly basis and will assist with:

- Soliciting input from community partners and professionals with knowledge of applicable hazards and related risk reduction methods
- Developing and implementing a community engagement strategy
- Milestone reviews of the Plan Update including, but not limited to, the Risk Assessment, Mitigation Strategy, Plan Maintenance and Implementation, and final draft Plan Update

In some cases, it may be necessary to conduct Planning Committee meetings virtually. If so, all virtual interactions will be conducted in a manner consistent with **[insert State]** and FEMA Region III guidance.

OPTIONAL (if the answer to Question 1.1.2 was YES), add: In addition, all meetings and interactions will be conducted consistent with the NFIP Community Rating System (CRS) flood mitigation planning requirements per CRS Activity 510.

Option 1.3-A: For use if Participating Jurisdictions can identify who will represent their communities:

The Planning Committee members include (but are not limited to):

- The Plan Developer and other **[Plan Owner]** staff
- Representatives of each of the Participating Jurisdictions. The current roster of these representatives includes:

Insert roster of known participants and their respective Participating Jurisdictions.

Note: This roster is subject to change as members may be added or changed both before and during the Plan Update process.

Option 1.3-B: For use if Participating Jurisdictions prefer to defer identifying who will represent their communities until after the Plan Update is initiated:

The Planning Committee members will include (but will not be limited to):

- The Plan Developer and other **[Plan Owner]** staff
- Representatives of the Participating Jurisdictions including (but not limited to) elected and appointed officials, community members, and business owners. The Participating Jurisdictions will seek out and engage individuals, agencies, and organizations:
 - Who were involved in developing and implementing the current HMP
 - Who are potentially impacted by hazard events
 - That are involved with parallel initiatives and interests
 - That represent potential community partners, e.g., hospitals/health sector, schools, utilities and infrastructure, big employers, small businesses, homeowner associations, non-profit organizations, etc.

Proposed members of the Planning Committee will be identified as soon as practical after the Plan Update is initiated for review and agreement by the State and FEMA Region III.

KEY DECISION #1.4: HOW WILL THE COMMUNITY BE ENGAGED?




1.4.1 Do you know how you and/or the Participating Jurisdictions will provide regular opportunities for the general public to review and comment on work-in-progress?



You will need to prepare a Community Engagement Strategy that includes, at a minimum, three separate opportunities for public review and comment, e.g., corresponding with major milestone deliverables during the project such as Risk Assessment, Mitigation Strategy, and Final Draft Plan Update.

These opportunities should be available for community partners across all of the Participating Jurisdictions in the form of workshops, webinars, and/or formal public hearings.

These meetings, workshops, or hearings may be conducted in-person or virtually (consistent with guidance for virtual interactions from the State and FEMA).

- ☐ YES  See Option 1.4-A in the **SAMPLE LANGUAGE** for how to include in the SOW.
- ☐ NO  Figuring this out may require more effort by the Participating Jurisdictions than they are willing or able to undertake before the Plan Update begins. If so, see Option 1.4-B in the **SAMPLE LANGUAGE** for how to include in the SOW.
- ☐ IDK  Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III regarding developing a Community Engagement Strategy.



Similar to Question 1.3.1, this needs to be written such that the State and FEMA Region III will be consulted, and their technical assistance and agreement sought regarding the proposed community engagement strategy.



FEMA Region III has prepared a related guidance document with additional considerations for developing an SOW when flooding is a known hazard. This document provides more detailed information for engaging the public as well as hazard profiling, identifying exposed community assets, and methodologies for assessing vulnerability and estimating losses.



ACTIVITIES to Help Resolve Key Decision #1.4

Identify what was included in the current approved HMP as a Community Engagement Strategy, determine if the strategy is considered successful, and include that information along with Question 1.4.1 as part of the discussion held to address Key Decision #1.1 and/or as a follow-up discussion with Participating Jurisdictions' POCs.



COST IMPLICATIONS for Key Decision #1.4

If the Community Engagement Strategy relies heavily on Planning Consultant support to schedule, prepare for and conduct meetings, workshops, and hearings, the cost of the Plan Update related to community engagement can be quite high.

If the Planning Consultant's involvement is limited to supporting development of briefing materials that are delivered by the Plan Developer and Planning Committee members, the cost implication for this Key Decision again becomes the time required by the Plan Developer and/or Participating Jurisdictions' representatives to arrange for and conduct the actual opportunities. Suggestions for potential time commitments by the Plan Developer and Planning Committee members are included in the Cost Implications for Key Decision #1.2 and #1.3.



One of the revelations from recent experiences with the COVID-19 pandemic is the utility of virtual platforms. This newfound understanding and technical fluency can enable communities to conduct cost-effective community engagement through these innovative technologies.



Members of the Participating Jurisdictions are better positioned to elicit participation and understand community priorities and issues than a Planning Consultant coming from outside the community. The Planning Consultant can still provide valuable support by providing messaging and helping to structure the content of meetings and documents, but the most cost-effective relationship is where the Plan Update is developed by the community members of the Participating Jurisdictions.



SAMPLE LANGUAGE to use for Key Decision #1.4 in the SOW

Option 1.4-A: For use if a community engagement strategy is completed as part of the SOW development:

The Plan Developer, with the support and full participation of the [Plan Owner] and the Planning Committee, will implement the following community engagement strategy:

Include a description of when and how community engagement will be conducted, including specifically how the Participating Jurisdictions' community members will be included.

Option 1.4-B: For use if a community engagement strategy will be completed after the Plan Update is initiated:

The Planning Committee will develop a proposed community engagement strategy as soon as practical after the Committee is established for review and agreement by the State and FEMA Region III. At a minimum, the strategy will include scheduling and conducting three public hearings, meetings, and/or workshops during the Plan Update process in a manner that is accessible to all the Participating Jurisdictions.

Also, similar to the Planning Committee meetings, in some cases, it may be necessary to conduct meetings, workshops, or hearings virtually. If so, all virtual interactions will be conducted in a manner consistent with [insert State] and FEMA Region III guidance.



PART 2: RISK ASSESSMENT

KEY DECISION #2.1: IDENTIFYING AND PROFILING HAZARDS

Which hazards threaten the participating jurisdictions and how bad can it get?

2.1.1 What hazards are included in the current approved HMP?



See **SAMPLE LANGUAGE** under “Identifying Hazards” for the table to use to enter your results in the left-hand column. Then, proceed to Question 2.1.2.

2.1.2 Are there hazards that threaten the Participating Jurisdictions that were not included in the current approved HMP?

☐ YES



Add these hazards to the left-hand column list from Question 2.1.1 in the table under **SAMPLE LANGUAGE**, put a check in the box for these hazards in the center column, and proceed to Question 2.1.3

☐ NO



Nothing needs to be added to the SOW; proceed to Question 2.1.3

☐ IDK



See **ACTIVITIES** under Hazard Identification

or

Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in identifying any new hazards that may threaten the Participating Jurisdictions before completing the SOW



Remember to account for “cascading effects” of hazard events. For example, the collapse of a structure where hazardous materials are handled due to high winds or heavy snow loads may create a hazardous materials release as a cascading effect.



Participating Jurisdictions may indicate “pandemic” as a new hazard of concern based on the COVID-19 pandemic. If so, it will be important to integrate preparedness planning efforts for pandemics included in local Emergency Operations Plans and/or as stand-alone pandemic planning efforts aligned with international, Federal, State, and local healthcare sector guidance with the Plan Update.

For example, these parallel planning efforts may identify mitigation actions related to pandemic preparedness. For example, securing and preparing sites for quarantine, treatment facility surge capacity, or fatality management may require physical improvements to public assets. While these may not be eligible for funding under FEMA’s Hazard Mitigation Assistance (HMA) programs, they could be considered valid actions to integrate within the Plan Update.

2.1.3 Are there hazards included in the current approved HMP that are no longer considered threats to the Participating Jurisdictions and should not be included in the Plan Update? Can you explain why? For example, as part of the Plan Implementation of the current approved HMP, have Participating Jurisdictions successfully mitigated hazards for community assets (as noted in Annual Plan Reviews)?

☐ YES



Put a check in the box for these hazards in the right-hand column and proceed to Question 2.1.4

☐ NO





Nothing needs to be added to the SOW; proceed to Question 2.1.4

2.1.4 Do you have the best available information to profile each of the hazards to be included in the Plan Update?

As a reminder, hazard profiles must include:

- ✓ Location
- ✓ Extent
- ✓ Previous Occurrences
- ✓ Probability of Future Events

☐ YES  See Option 2.1-A in the **SAMPLE LANGUAGE** under “Profiling Hazards” for the table to use to enter your results

☐ NO  See **ACTIVITIES** under Hazard Profiling and/or

Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in profiling any or all hazards that may impact the Participating Jurisdictions before completing the SOW

and/or

Defer this activity until the Plan Update begins. If identifying all of the “best available information” for each of the hazards under Question 2.1.4 requires more time and expertise than is available before the Plan Update begins, see Option 2.1-B in the **SAMPLE LANGUAGE** under “Profiling Hazards” for how to include in the SOW



The SOW can be written to indicate this particular key decision will be completed after the Plan Update is initiated subject to consultation, technical assistance, and agreement with the State and FEMA Region III.



Working with the State and FEMA Region III to ensure the most current information is used in the Plan Update markedly improves the relevance and effectiveness of the Plan Update and supports the most accurate depiction of the Participating Jurisdictions in the State’s HMP.



ACTIVITIES to Help Resolve Key Decision #2.1

Hazard Identification (Questions 2.1.1, 2.1.2, and 2.1.3): Identify what hazards were included in the current approved HMP and consider the following questions:

- Did an event or incident occur since the approval of the current HMP such that new hazard(s) now pose a threat?
- Did successful mitigation measures eliminate exposure of community assets to a particular hazard?
- Do projections of how hazard impacts could change due to demographic, development, or climate change have implications for the Participating Jurisdictions?



Making sure that the Plan Update accounts for current projections due to climate change can improve a community’s bond rating. The bond rating companies take this as one sign that a community is managing risk to the extent practical.

- Does the most current version of your State’s HMP identify hazard(s) of concern for your Participating Jurisdictions that were not included in the current approved HMP?

Hazard Profiling (Question 2.1.4):

- Do you understand what data was used for the Risk Assessment in the current approved HMP? If not, can you contact the Plan Developer or Planning Consultant and request this information?
- What is the best available information for each of the hazards to be included in the Plan Update?

Sources of information for Question 2.1.4 include:

- ✓ Has the Plan Owner and/or Participating Jurisdictions kept records of hazard impacts since the current HMP approval?
- ✓ Have detailed studies been performed by or for Participating Jurisdictions that provide improved hazard information, e.g., FEMA Risk MAP products for flood hazard?
- ✓ Does the State HMP indicate more current information is available?
- ✓ Are there other hazard-specific sources of information available from the State or FEMA Region III?



FEMA Region III has prepared a related guidance document with additional considerations for developing an SOW when flooding is a known hazard. This document provides more detailed information for hazard profiling as well as identifying exposed community assets and methodologies for assessing vulnerability and estimating losses.

If time and opportunity allow, you should also review and validate your findings for Questions 2.1.1 through 2.1.4 as part of discussions with Participating Jurisdictions' POCs.



COST IMPLICATIONS for Key Decision #2.1

For Identifying and Profiling Hazards, it is assumed the data is available and the work effort for the Plan Update SOW is primarily collection and compilation. Therefore, the cost for Key Decision #2.1 is the time required to identify and pull together data that already resides with the Plan Owner, Participating Jurisdictions, the State, and/or FEMA Region III.

This “scavenger hunt” can be completed prior to the Plan Update with a concerted and cooperative effort between the parties and should not require the support of a technical Planning Consultant. If during the Plan Update, additional or better information is discovered, it is a relatively simple matter to incorporate as a revision into the SOW at that time.



SAMPLE LANGUAGE to use for Key Decision #2.1 in the SOW

The following language options can be inserted in the SOW based on your findings for Questions 2.1.1 through 2.1.4:



All of the Sample Language for the Risk Assessment assumes a multi-jurisdictional HMP update where the Participating Jurisdictions will be relying on the Plan Owner to provide the Plan Developer and support community risk assessment processes; the Plan Owner will contract with a Planning Consultant to provide technical support; and a joint Planning Committee will have been established representing all of the Participating Jurisdictions (see Planning Process Key Decision #1.3).

RISK ASSESSMENT

Note: Anticipated Plan Update efforts for the Risk Assessment are described below. These efforts are subject to change if new or different information is uncovered during the Plan Update process.

The Plan Developer will compile data and update the risk assessment with the support of the Planning Consultant and full participation of the Planning Committee.

Hazard Identification. It is anticipated the Plan Update will address the following hazards for Participating Jurisdictions:

<i>Hazard</i>	<i>Proposed Addition for Plan Update</i>	<i>Proposed Deletion for Plan Update</i>
insert all hazards included in the current HMP and all proposed additions, one per line	check if applicable and note reason for any additions	check if applicable and note reason for any deletions
add lines as needed		

Option 2.1-A: For use if data compilation efforts are completed as part of the Plan Update SOW development:

- **Hazard Profiling** as part of the Plan Update will include the following data:
 - Used in the current HMP dated [insert approval year] where no new information is available
 - Developed and/or acquired by the [Plan Owner] and Participating Jurisdictions since the current HMP approval date
 - Developed and/or acquired by the [Plan Owner] and Participating Jurisdictions during the Plan Update process

<i>Hazard</i>	<i>Data Source used in Current HMP to be used in Plan Update</i>	<i>Data Developed and/or Acquired since Current HMP for Plan Update</i>	<i>Data to be Developed and/or Acquired during the Plan Update Process</i>
insert all hazards identified to be included in Plan Update, one per line	provide response in one or more data source columns as applicable		
add lines as needed			

Option 2.1-B: For use if data compilation efforts will be completed after Plan Update initiation:

- **Hazard Profiling** as part of the Plan Update will include hazard profiling data:
 - Used in the current HMP dated [insert approval year] if no new information is available
 - Developed and/or acquired by the [Plan Owner] and Participating Jurisdictions since the current HMP approval date

Hazard profiling data will be identified as soon as practical after the Plan Update is initiated for review and agreement by the State and FEMA Region III.



Before proceeding to Key Decision #2.2, if the response to Question 2.1.4 was to defer profiling hazards until the Plan Update is initiated, it will not be practical to identify “exposed” community assets. Exposure is a function of hazard profile information for location and extent. Without hazard location and extent information, asset exposure cannot be reliably determined.

If that is the case, see Option 2.2-C in the SAMPLE LANGUAGE for how to include in the SOW and skip Questions 2.2.1 through 2.2.4.

However, it may be more than a year before the Plan Update is formally initiated. Therefore, it is strongly recommended the Plan Owner and parties involved with ongoing Plan Maintenance activities for the current approved HMP review Key Decision #2.2 and determine if and how to compile useful information about potentially exposed community assets for use in the Plan Update.

In either case, you can also use the TA CHECKLIST to request assistance from the State and FEMA Region III in identifying and profiling exposed community assets.

KEY DECISION #2.2: IDENTIFYING AND PROFILING EXPOSED COMMUNITY ASSETS

Which participating jurisdiction community assets may be exposed and vulnerable to impacts from identified hazards?




2.2.1 What community assets are included in the current approved HMP? As a reminder, both public and private community assets can be categorized per the following:

- ✓ Structures
- ✓ Critical facilities and infrastructure
- ✓ Natural resources




See **ACTIVITIES** under Community Asset Identification

Then, see *Option 2.2-A* in the **SAMPLE LANGUAGE** for how to reference the results in the SOW and proceed to Question 2.2.2.




2.2.2 Are there public community assets that may be exposed to hazards that were not included in the current approved HMP?

- ☐ YES  See **ACTIVITIES** under Community Asset Identification and add these assets to the tabulation from Question 2.2.1, put a check in the appropriate box(es) for these assets in the descriptive columns, and proceed to Question 2.2.3.
- ☐ NO  Nothing needs to be added to the SOW; proceed to Question 2.2.3.
- ☐ IDK  See **ACTIVITIES** under Community Asset Identification and/or
Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in identifying any potentially exposed public community assets before completing the SOW.

2.2.3 Are there private community assets that may be exposed to hazards that were not included in the current approved HMP?

- ☐ YES  See **ACTIVITIES** under Community Asset Identification and add these assets to the tabulation from Question 2.2.1, put a check in the appropriate box(es) for these assets in the descriptive columns, and proceed to Question 2.2.4.
- ☐ NO  Nothing needs to be added to the SOW; proceed to Question 2.2.4.
- ☐ IDK  See **ACTIVITIES** under Community Asset Identification and/or
Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in identifying any potentially exposed private community assets before completing the SOW.

2.2.4 Do you have the best available information to profile these potentially exposed community assets, including those already included in the current approved HMP and those that should be added for the Plan Update? As a reminder, in addition to information specific to the different categories of community assets (i.e., structures; critical facilities and infrastructure; and natural resources), the profiles should also reflect relevant characteristics regarding the people and economic activity that depend on these physical assets.

- ☐ YES  See **ACTIVITIES** under Community Asset Profiling.
Then, see Option 2.2-A in the **SAMPLE LANGUAGE** for how to reference the results in the SOW.
- ☐ NO  See **ACTIVITIES** under Community Asset Profiling
and/or
Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in profiling any potentially exposed community assets before completing the SOW
and/or
 Defer this activity until the Plan Update begins. If identifying all of the “best available information” for each of the potentially exposed community assets under Question 2.2.4 requires more time and expertise than is available before the Plan Update begins, see Option 2.2-B in the **SAMPLE LANGUAGE** for how to include in the SOW.



The SOW can be written to indicate that all or part of this particular key decision will be completed after the Plan Update is initiated subject to consultation, technical assistance, and agreement with the State and FEMA Region III.



The success and effectiveness of the Mitigation Strategy depends on a clear understanding of what is at risk and the nature of the problem. This understanding in turn depends on the depth and breadth of information that can be gathered regarding exposed community assets.



ACTIVITIES to Help Resolve Key Decision #2.2

Community Asset Identification (Question 2.2.1):

First, to the extent practical prior to completing the Plan Update SOW, work with Participating Jurisdictions’ POCs to list exposed Community Assets that have previously been identified:

- In the current approved HMP
- Since the current HMP approval date (via ongoing Plan Maintenance efforts)
- In other related plans such as Emergency Operations Plans, State and Federal critical infrastructure programs, FEMA disaster declaration records, etc.

Record your results per the following:

- ✓ Use Table 2.2-1 (see below), or a similar format you may prefer, to create a list of exposed community assets and describe the type of asset
- ✓ Use Table 2.2-2 (see below), or a similar format you may prefer, to indicate which hazard(s) potentially impact each asset

Community Asset Identification (Questions 2.2.2 and 2.2.3):

Next, compare hazard profile information for location and extent with the locations of other known public and private community assets to determine if any of the identified assets are potentially “exposed” and record your results in Table 2.2-1.



Any community asset that is within or near an area potentially impacted by a hazard with known geographic extent should be considered as “potentially exposed”. For example, an asset in or near the 1-percent annual-chance floodplain should be considered potentially floodprone.

For hazards that can impact an entire community, such as high winds or severe winter storms, any and all public and private community assets should be considered potentially exposed.

- Are there potentially exposed public community assets not already listed, including (but not limited to):
 - ✓ Critical facilities such as EMS, fire and police stations, and healthcare facilities?
 - ✓ Lifeline infrastructure such as roads, bridges, and utilities?
 - ✓ Facilities that care for vulnerable members of the community such as schools and senior centers
 - ✓ Natural resources that provide important environmental benefits?
- Are there potentially exposed private community assets not already listed including (but not limited to) residential, commercial, and industrial structures:
 - ✓ Facilities that care for vulnerable members of the community such as day-care and assisted living facilities?
 - ✓ Significant economic drivers for the community or region?
 - ✓ Local historic and cultural resources?



These assets may not have been previously identified for reasons such as:

- ✓ No clear hazard exposure in the past
- ✓ Newly constructed and occupied
- ✓ Planned as part of future development or expansion
- ✓ Assets that sustained unanticipated damage due to a hazard event



Ideally, it is recommended that the community asset information be captured as database entries that can be utilized in a Geographic Information System (GIS). Tables 2.2-1 and 2.2-2 are examples for how the results of the community asset identification process can be summarized (potentially as output from the database). The table can then be included with the SOW and cross-referenced as an attachment.

Table 2.2-1: Potentially Exposed Community Asset - Descriptions

Potentially Exposed Community Asset Name/Identifier	Public	Private	Critical Facility Structure	Lifeline Infrastructure	Vulnerable Population	Natural Resource	Residential Structures	Commercial Structures	Industrial Structures	Economic Driver	Historic/Cultural Resource
For each Participating Jurisdiction, insert all community assets included in the current HMP as well as all proposed additions, one per line, and check all descriptive columns that apply											
add lines as needed											



You may want to differentiate between assets that are already identified in the current approved HMP and those that have been identified since.

Table 2.2-2: Potentially Exposed Community Asset – Hazard Exposure

Potentially Exposed Community Asset Name	Flood	High Winds	Severe Weather – Winter Storms	Other _____	Other _____	Other _____	Other _____	Other _____	Other _____	Other _____	Other _____
<i>For each Participating Jurisdiction, insert all community assets from Table 2.2-1, one per line, and check all hazard exposure columns that apply</i>											
<i>add lines as needed</i>											



You may want to create separate tables for public versus private community assets. Responsibility for the former usually rests with the elected and appointed officials with the Participating Jurisdiction, while the private assets will need to involve property owners and inhabitants.

See Option 2.2-A in the **SAMPLE LANGUAGE** for how to reference Tables 2.2-1 and 2.2-2 and/or a related database in the SOW.

Community Asset Profiling (Questions 2.2.4):

After recording the results of the Community Asset Identification in Tables 2.2-1 and 2.2-2, to the extent practical prior to completing the Plan Update SOW, work with Participating Jurisdictions' POCs to compile relevant characteristics for community assets that will help determine vulnerability.

In general, you are trying to relate community asset profiles to the type(s) of hazard, i.e., determining if/how assets could be impacted by the identified hazard(s), for all community assets to be included in the Plan Update.

This includes accounting for the differences in asset types per the following:

- Structures
 - ✓ Location, type, age, and tax-assessed value
 - ✓ Use and functionality
 - ✓ Unusual attributes (e.g., properties with iconic, historic, or cultural significance)
 - ✓ Location and type of planned future development/redevelopment
- Critical Facilities and Infrastructure
 - ✓ Location, types, age, and value
 - ✓ Interdependencies
 - ✓ Planned critical facilities and capital improvements
 - ✓ Infrastructure for new development
- Natural Resources, i.e., areas where conservation of environmental functions:
 - ✓ Reduce the magnitude of hazards
 - ✓ Help achieve other community objectives
 - ✓ Protect critical habitat areas

This also includes accounting for the differences in how these assets may be used per the following:

- People
 - ✓ Locations and concentrations of residents and employees
 - ✓ Locations and concentrations of special needs and vulnerable populations
 - ✓ Types and locations of visiting populations
- Economic Activity
 - ✓ Major employers
 - ✓ Primary economic sectors
 - ✓ Commercial centers
 - ✓ Dependencies between economy and infrastructure, e.g., transportation corridors

In addition, this process needs to account for the differences in hazard impacts. Initial efforts to capture asset characteristics can be accomplished with relatively minor time investment. This should not require a detailed engineering assessment at this stage, but rather visual inspections to see if there might be problems that can be addressed with mitigation actions. Some examples of what you might look for relative to specific hazards include:

- ✓ Severe Weather – Winter Storms: One consequence of heavy snow is potential roof collapse. Go inside an asset you are interested in and see if there is any visual evidence of roof leaks. Stains on exposed beams or stains on ceiling tiles might indicate a long-term leak that has weakened a roof.
- ✓ High Winds – High winds can break windows that are not rated for the kinds of winds you experience in your area. Once the windows fail, the interior and the roof of the structure become much more vulnerable. If construction documents are still available for an asset of interest, see if there is a rating for the windows. If not, visually inspect the windows to see if there are any certifications indicated and whether or not the windows seem substantial and in good repair (e.g., cracked windowpanes may indicate non-tempered glass).

That's all you need to do for the initial effort. In the Mitigation Strategy, more effort and/or detailed studies can be exerted to see if any of this visual evidence represents significant problems.



FEMA Region III has prepared a related guidance document with additional considerations for developing an SOW when flooding is a known hazard. This document provides more detailed information for identifying and profiling floodprone community assets as well as hazard profiling and methodologies for assessing vulnerability and estimating losses.

Use the TA CHECKLIST to request assistance from the State and FEMA Region III for additional considerations for other hazards and potential impacts on community assets.



It is not practical to include all the potential options for how to tabulate this wide variety of data in a guidance document such as this. However, as previously noted, it is recommended that this information be captured in GIS compatible formats for ease and flexibility of use in the Plan Update and subsequent mitigation action implementation.

See Option 2.2-A in the **SAMPLE LANGUAGE** for how to include in the SOW.



COST IMPLICATIONS for Key Decision #2.2

For Identifying and Profiling Exposed Community Assets, it is assumed that little relevant data already exists and, in most cases, only limited new data can be developed during the Plan Update due to the cost and time commitment to develop substantial data records. However, since it may take more than a year before the Plan Update is formally initiated, it may be worth the effort to capture new asset characteristics data either before or during the Plan Update for certain assets, e.g., for critical facilities.

For the type of initial visual assessments indicated in ACTIVITIES, working with the facility manager to review any available construction documents and conducting a walk-through may only take a few hours. This has the additional advantage of engaging the facility manager, who may be aware of problems that are not immediately evident. This does not require costly consulting assistance; most of the types of things you want to look for at this stage are more common-sense than needing subject matter expertise.

If no new facility assessments are conducted, the cost for Key Decision #2.2 is the time required to identify and pull together data that either already resides with the Plan Owner, Participating Jurisdictions, the State, and/or FEMA Region III, or which can be gathered by the Plan Owner and the Participating Jurisdictions.

The community asset identification part of the data “scavenger hunt” can be completed either prior to or during the Plan Update with a concerted and cooperative effort between the parties and should not require extensive support of a technical Planning Consultant. However, profiling exposed community assets is another matter as it requires a determination that the asset is exposed and then gathering asset characteristics that are relevant for the asset type and the relevant hazard(s). The largest share of the work effort can still be accomplished by the Plan Owner and Participating Jurisdictions, but the Planning Consultant will likely be able to help identify what asset characteristics are relevant for specific hazard exposure.



Improving data depth and breadth for community assets should be included in ongoing Plan Maintenance for the current approved HMP.



SAMPLE LANGUAGE to use for Key Decision #2.2 in the SOW

The following language options can be inserted in the SOW based on your findings for Questions 2.2.1 through 2.2.4:

Option 2.2-A: *For use if community asset identification and profiling efforts are substantially completed before or as part of the SOW development:*

- Community Asset Identification and Profiling – The Participating Jurisdictions have identified and profiled exposed public and private community assets. These community assets, and to the extent practical, any additional community assets identified during the course of the Plan Update, will be analyzed in subsequent steps in the Plan Update process to determine the extent of hazard impacts.

See attached summary of identification and profiling information for exposed community assets for the Participating Jurisdictions.

Option 2.2-B: *For use if community asset identification efforts are substantially completed before or as part of SOW development but community asset profiling efforts are completed after Plan Update initiation:*

- Community Asset Identification – The Participating Jurisdictions have identified exposed public and private community assets. These community assets, and to the extent practical, any additional community assets identified during the course of the Plan Update, will be profiled and analyzed in subsequent steps in the Plan Update process to determine the extent of hazard impacts.

See attached summary of identification information for exposed community assets for the Participating Jurisdictions.

- Community Asset Profiles – At a minimum, the Plan Update will identify relevant characteristics for identified public and private community assets related to specific hazard(s) that may impact the assets:
 - Structures
 - ✓ Location, type, age, and tax-assessed value

- ✓ Use and functionality
- ✓ Unusual attributes (e.g., properties with iconic, historic, or cultural significance)
- ✓ Location and type of planned future development/redevelopment
- Critical Facilities and Infrastructure
 - ✓ Location, types, age, and value
 - ✓ Interdependencies
 - ✓ Planned critical facilities and capital improvements
 - ✓ Infrastructure for new development
- Natural Resources, i.e., areas where conservation of environmental functions:
 - ✓ Reduces magnitude of hazards
 - ✓ Helps achieve other community objectives
 - ✓ Protects critical habitat areas
- People
 - ✓ Locations and concentrations of residents and employees
 - ✓ Locations and concentrations of special needs and vulnerable populations
 - ✓ Types and locations of visiting populations
- Economic Activity
 - ✓ Major employers
 - ✓ Primary economic sectors
 - ✓ Commercial centers
 - ✓ Dependencies between infrastructure, e.g., transportation corridors and economic activity

Community asset profiling data compilation methods and expectations will be identified as soon as practical after the Plan Update is initiated for review and agreement by the State and FEMA Region III.

Option 2.2-C: For use if community asset identification and profiling efforts are completed after Plan Update initiation:

- Community Asset Identification – At a minimum, the Plan Update will identify exposed public and private community assets according to the following categorizations:
 - Public Community Assets
 - ✓ Critical facilities such as EMS, fire, and police stations, and healthcare facilities
 - ✓ Lifeline infrastructure such as roads, bridges, and utilities
 - ✓ Facilities that care for vulnerable members of the community such as schools and senior centers
 - ✓ Natural resources that provide important environmental benefits
 - Private Community Assets including residential, commercial, and industrial structures
 - ✓ Facilities that care for vulnerable members of the community such as day-care and assisted living facilities
 - ✓ Significant economic drivers for the community or region
 - ✓ Local historic and cultural resources
 - Hazard identification and profiling results to determine specific hazard exposure

These assets will be identified using (but not limited to) the following sources:

- Community asset data developed and/or acquired by the [Plan Owner] and Participating Jurisdictions during and since the current HMP approval date including (but not limited to):
- Related plans and documents with the [Plan Owner] and Participating Jurisdictions including (but not limited to):
 - ✓ Current Emergency Operations Plans (EOPs)

✓ **Insert other related plans and documents**

- State of **[insert State]** data:
 - ✓ Relevant portions of the most current version of the **[insert State]** State Hazard Mitigation Plan (SHMP).
 - ✓ Critical infrastructure per information from the **[insert State agency responsible for critical infrastructure protection]** (e.g., oil/gas pipelines, electric transmission systems, schools, fire stations, law enforcement, health care facilities, transportation infrastructure).
 - ✓ Ongoing research by **[insert State]**, regional universities, and other non-governmental agencies regarding a range of risk factors in **[insert State]**.
- Federal Emergency Management Agency (FEMA) data, including where applicable:
 - ✓ Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA), and Hazard Mitigation Grant Program (HMGP) project grants
 - ✓ Flood Hazard Risk MAP products including Digital Flood Insurance Rate Maps (DFIRMs) allowing for ongoing revisions and updates.
 - ✓ National Flood Insurance Program (NFIP) Policies and Claims data including Repetitive Loss and Severe Repetitive Loss Lists.
 - ✓ **Insert if applicable** Information from disaster declarations since the current HMP approval date including Preliminary Damage Assessments and Public Assistance Project Worksheets from recent disaster declarations.

OPTIONAL: List disaster declarations (if any) since the current HMP approval date

- Data from other Federal and State agencies such as open source information regarding hazard histories and impacts from the National Oceanic and Atmospheric Administration National Climatic Data Center and the Homeland Security Infrastructure Protection database.
- Community Asset Profiles – At a minimum, the Plan Update will identify relevant characteristics for identified public and private community assets related to specific hazard(s) that may impact the assets:
 - Structures
 - ✓ Location, type, age, and tax-assessed value
 - ✓ Use and functionality
 - ✓ Unusual attributes (e.g., properties with iconic, historic, or cultural significance)
 - ✓ Location and type of planned future development/redevelopment
 - Critical Facilities and Infrastructure
 - ✓ Location, types, age, and value
 - ✓ Interdependencies
 - ✓ Planned critical facilities and capital improvements
 - ✓ Infrastructure for new development
 - Natural Resources, i.e., areas where conservation of environmental functions:
 - ✓ Reduces magnitude of hazards
 - ✓ Helps achieve other community objectives
 - ✓ Protects critical habitat areas

- People
 - ✓ Locations and concentrations of residents and employees
 - ✓ Locations and concentrations of special needs and vulnerable populations
 - ✓ Types and locations of visiting populations
- Economic Activity
 - ✓ Major employers
 - ✓ Primary economic sectors
 - ✓ Commercial centers
 - ✓ Dependencies between infrastructure, e.g., transportation corridors and economic activity

Community asset identification and profiling data compilation methods and expectations will be identified as soon as practical after the Plan Update is initiated for review and agreement by the State and FEMA Region III.



Before proceeding to Key Decision #2.3, if the response to Question 2.1.4 was to defer profiling hazards until the Plan Update is initiated, and identifying and profiling exposed community assets was also deferred under Key Decision #2.2, it will not be practical to definitely determine which methodologies make sense for the Plan Update.

If that is the case, see Option 2.3-B in the **SAMPLE LANGUAGE** for how to include in the SOW and skip Question 2.3.1.

However, as previously noted, it may be more than a year before the Plan Update is formally initiated. Therefore, it is strongly recommended that the Plan Owner and parties involved with ongoing Plan Maintenance activities for the current approved HMP, review Key Decision #2.3. As information is compiled about hazards and potentially exposed community assets, you can consider the implications for use in the Plan Update.

In either case, you can also use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in deciding what methodologies make sense for your situation.

KEY DECISION #2.3: ASSESSING AND SUMMARIZING VULNERABILITY AND IMPACTS

How will participating jurisdictions make informed decisions when identifying mitigation actions and prioritizing resources?




- 2.3.1** Do you know which of the three main methods for assessing vulnerability and impacts and estimating losses, will be applicable for each of the identified hazards and the available data regarding community assets in the Plan Update?



It is common to use different methodologies for specific hazards due to hazard characteristics and available data. Again, the immediate task is defining the SOW, not undertaking the whole Plan Update process. However, it may be possible to define the general methodology to be used for at least some of the hazards with the understanding this may be subject to change if new or different information is uncovered during the Plan Update.

As a reminder, the three main methods are generally referred to as follows:

- ✓ Exposure analysis
- ✓ Historical analysis
- ✓ Scenario analysis

- ☐ YES  See Option 2.3-A for how to reference the results in the SOW including completing Table 2.3-1 in the **SAMPLE LANGUAGE**.
- ☐ NO  See **ACTIVITIES** under Vulnerability and Impact Assessment.
and/or
Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in determining which methodologies could work for the Plan Update before completing the SOW.
and/or
 Defer this activity until the Plan Update begins. If determining which methodologies could work for the Plan Update under Question 2.3.1 requires more time and expertise than is available before the Plan Update begins, see Option 2.2-B in the **SAMPLE LANGUAGE** for how to include in the SOW.



The SOW can be written to indicate that all or part of this particular key decision will be completed after the Plan Update is initiated subject to consultation, technical assistance, and agreement with the State and FEMA Region III.



As noted already, the success and effectiveness of the Mitigation Strategy, as well as the Plan Implementation, depends on a clear understanding of what is at risk and the nature of the problem. This Key Decision must balance the need for understanding risk with the available information and Participating Jurisdictions' capabilities.



ACTIVITIES to Help Resolve Key Decision #2.3

Vulnerability and Impact Assessment:

First, keep perspective on what this part of the planning process is supposed to reveal:

- Indicating how exposed community assets may be impacted.



Impacts are the consequences or effects of a hazard on the community and its assets. The type and severity of impacts are based on the magnitude of the hazard and the vulnerability of the asset, i.e., a house made of bricks can withstand a more substantial high wind event than a house made of wood (apologies to the three pigs!).

Impacts can be measured qualitatively. This would be more of a "yes/no" approach. An asset is either vulnerable or it is not. It is not very useful for identifying specific mitigation alternatives but does draw attention to an asset for further analysis

Impacts can also be measured quantitatively. This can be in terms of percent damage anticipated which, if the asset value is known, can be translated into anticipated losses. If the probability of the impact is known and considered, then the impact can be expressed as an annualized anticipated loss. Annualized losses are very helpful in computing the benefit versus cost ratio for mitigation actions to address the problem (which is a fundamental requirement for any grant or funding source). The annual loss (or benefit if the loss can be avoided) can be compared to the cost of the action, which is also converted to an annual basis by considering the useful life of the project.

In addition, as noted above, the cascading effects of hazards on community assets should be considered as well.

- Providing a basis for making relative risk determinations and establishing prioritization of mitigation actions
- Providing actionable information for existing and future development



Ideally, it is preferred to learn about how each exposed asset will be impacted, i.e., determining annual anticipated losses on a structure-by-structure or individual asset basis for all relevant hazards. This would allow for clear and objective decision making regarding the most cost-effective risk reduction measures.

Unfortunately, available data and resources may not support this level of effort across the whole planning area. However, it is not unusual to use the basic methodologies identified here as a way to sort out or identify areas or individual assets that justify the level of effort to conduct more detailed facility assessments both during the Plan Update and as part of sustained Plan Maintenance activities.

*If you want to learn more about conducting individual facility assessments beyond the initial visual inspections discussed under Key Decision #2.2, use the **TA CHECKLIST** to engage the State and FEMA Region III to discuss more detailed asset and facility assessment options.*

Next, review the three main vulnerability and impact assessment methodologies. Consider the data, capabilities, software, and technological requirements to undertake these methodologies. Also, consider what kind of results can be expected.

The following is a brief overview of the three methodologies:

- **Exposure Analysis** - This is a way to build directly on the results of the previous step in the process, i.e., identifying and profiling community assets. The main difference is assigning relative values for anticipated impacts based on the available information. For example, distinctions can be made between assets exposed to wildfire based on:
 - Location in a defined Wildland–Urban Interface (WUI) = High Vulnerability and Anticipated Impact
 - Location near a WUI = Moderate
 - Location a safe distance from a WUI = Low

The number, type, and/or total value of assets in the areas designated as High and Moderate could be estimated using US Census tract or block information on real estate values or by using local tax assessor information if individual parcels can be identified (using GIS). This is a rough approximation of impacts on exposed / vulnerable assets and probably overstates what would be anticipated in any particular wildfire event but provides a way to compare impacts of different hazards (which usually have different levels and resolution of available data) and potentially identify areas for more detailed asset-by-asset or structure-by-structure assessments.

Hazards that are suitable for exposure analysis include (but are not limited to) Dam Failure, Flooding, and Wildfire. This method can also be used for certain technological hazards such as Hazardous Material Releases where assets can be mapped relative to an identifiable hazard event.

- **Historical Analysis** - Historical analysis is a technique that can be used separately or in conjunction with Exposure Analysis to attempt to quantify impacts and anticipated losses for comparative basis and the establishment of mitigation priorities. This method can also be used to consider the vulnerability of new development. The basic premise is that whatever has happened before, can happen again.

While there is a good intuitive basis for using this approach, there are also limitations. Depending on factors such as the extent of new development or the magnitude of potential changes in hazard profiles due to climate change, the results may understate anticipated losses.

Historical analysis is suitable for use with hazards that have higher frequency events with available data on past impacts and losses including (but not limited to) Drought, Flooding, and Severe Weather – Winter Storms.

- **Scenario Analysis** - Scenario analysis can help determine potential impacts if a hazard event occurs, including direct damage, casualties, facility down time, etc. The method involves the use of:
 - Computer software modeling, such as Hazus (FEMA's loss estimation software)
 - Damage curves, which can be adapted for spreadsheet analysis, relating hazard extent and intensity with asset characteristics to estimate the percentage of building and contents values that may be impacted

The more detailed information available for both hazards and assets, the more precise and accurate the results. It is important to consider who may be conducting the scenario analysis, e.g.:

- Planning Consultants, who should be proficient in the technical requirements for any approach
- In-house GIS staff, who may be able to run a program such as Hazus
- Local floodplain managers, who may be more comfortable conducting a spreadsheet analysis with damage curves

Scenario analysis is suitable for low-frequency, high-consequence events including (but not limited to) Dam Failure, Earthquake, and Flooding.

Next, determine what methodologies are used in the current approved HMP to assess vulnerability and impacts and estimating losses and fill in the middle column in Table 2.3-1 in Option 2.3-A in the **SAMPLE LANGUAGE**. It will also be important to compare the data used in the current HMP for these methodologies with the data that is or will be available for the Plan Update. Better, more refined data may allow for a change in the methodology used in the next go-around.



FEMA Region III has prepared a related guidance document with additional considerations for developing an SOW when flooding is a known hazard. This document provides more detailed information for methodologies for assessing vulnerability and impacts as well as hazard profiling and identifying and profiling floodprone community assets.

*Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III for additional considerations for other hazards and related considerations for assessing vulnerability and impacts.*

Then:

- Identify the methodology and related technology that fits the current or anticipated data for hazards and assets, as well as available human and financial resources (see Cost Implication below) and fill in Table 2.3-1 in Option 2.3-A in the **SAMPLE LANGUAGE**.

and/or

- Use the **TA CHECKLIST** to request technical assistance from the State and FEMA Region III, as well as appropriate academia, not-for-profit organizations, local subject matter experts, and the Participating Jurisdictions, to review available hazard and community asset data sources and possible risk assessment methodologies.



COST IMPLICATIONS for Key Decision #2.3

The options for methodologies can differ widely in terms of cost. The cost factors usually relate to the resolution of available data. For example, a risk assessment for a community with extensive data regarding individual community assets can employ more sophisticated methodologies. However, these are also usually more time and technology intensive. In most cases, this is the area where Planning Consultants play a more significant role in the Plan Update process with related increased cost implications.

There are other considerations in making this decision that are cost-related but potentially difficult to resolve during the SOW development. At this point, the preceding Key Decisions may not have yielded complete information about hazards or exposed community assets, both of which are needed to identify appropriate methodologies. Therefore, as a default, Key Decision #2.3 may identify the most basic methodology that will meet FEMA requirements but as a minimum acknowledge that after the Plan Update is initiated and available data becomes clearly defined, the Plan Developer, Planning Consultant, and the Participating Jurisdictions will decide on the appropriate and affordable level of effort and review the revised methodologies with the State and FEMA Region III to gain their approval to proceed.



SAMPLE LANGUAGE to use for Key Decision #2.3 in the SOW

- *The Risk Assessment Update will be started as soon as the project commences, and data acquisition is initiated. The process will clearly identify aspects that have changed since the approval of the current HMP dated [insert approval year]. The Risk Assessment Update will rely on information that is immediately available and will include:*
 - *Updates to the hazard and asset identification and profiles, vulnerability assessments, loss estimates, and relative risk rankings for all hazards indicated above. This work includes*
 - ✓ *Incorporating all relevant hazards and cascading effects of hazard events where appropriate*
 - ✓ *Ensuring consistency with the [insert State] State Hazard Mitigation Plan*
 - ✓ *Identifying hazards that are not clearly mitigation issues, and ensuring all hazards are covered in appropriate [Plan Owner] and Participating Jurisdictions planning programs. For example, hazards such as “airline crashes” are typically addressed in EOPs.*
 - ✓ *Identifying data limitations for incorporation in the Mitigation Strategy*
 - ✓ *Incorporating climate change implications into the discussion of risk and mitigation.*
 - Note: Although the implications of climate change for all areas of the country continue to be refined, it is important to acknowledge and seek to understand the potential problems.*
 - *Development of individualized summaries on a jurisdiction-by-jurisdiction basis identifying Risk Assessment Update results specific to each Participating Jurisdiction consistent with [insert State] and FEMA Region III expectations.*
 - Note: These jurisdictional HIRA reports will be a key part of individual Appendices that will be included in the final Plan Update for each Participating Jurisdiction and will provide improved linkages between risk assessments and resulting mitigation strategies.*

Option 2.3-A: *For use if Vulnerability and Impact Assessment Methodologies can be determined as part of the SOW development:*

- *Using the following methodologies and technology for vulnerability assessments and/or loss estimation:*
 - ✓ *Used in the current HMP if no new methodology or software is available*
 - ✓ *New methodology and/or technology*

Table 2.3-1: Potentially Exposed Community Asset - Descriptions

Hazard	Methodology/Technology used in Current HMP to be used in Plan Update	New Methodology/Technology to be used in Plan Update
<i>insert all hazards identified to be included in the Plan Update, one per line</i>	<i>provide one response per hazard</i>	
<i>add lines as needed</i>		

Option 2.3-B: *For use if Vulnerability and Impact Assessment Methodologies can be determined as part of the SOW development:*

- Using appropriate methodologies and software for vulnerability assessments and/or loss estimation to be identified based on the results of the hazard and community asset data compilation efforts including:
 - ✓ Used in the current HMP if no new methodology or software is available
 - ✓ New methodology and/or technology

Risk Assessment methodologies will be identified as soon as practical after the Plan Update is initiated for review and agreement by the State and FEMA Region III.

- Deliverables, Review Process, and Time Schedule

Reviews of all Risk Assessment deliverables will be conducted by the Plan Developer as part of regular Planning Committee meetings and appropriate community outreach activities to:

- Validate Risk Assessment Update results including draft and final draft versions of overall results and Participating Jurisdictions' individual summaries
- Articulate "Problem Statements" summarizing the results of the Risk Assessment in a way that focuses attention for the subsequent Mitigation Strategy process, including where appropriate, identifying vulnerability and impacts on an asset-by-asset basis
- Develop "Relative Risk Rankings," using ranking criteria to be developed with the Planning Committee. These Relative Risk Rankings will be used as part of the prioritization process in the Mitigation Strategy

It is anticipated that the Risk Assessment process will be completed [insert anticipated completion date or elapsed time from project initiation]

As detailed in the Letter of Agreement, each Participating Jurisdiction will:

- Provide information as requested by the Plan Developer
- Ensure community engagement in the review of Risk Assessment Update work-in-progress
- Provide timely comments for all milestone reviews



Part 3 of the Plan Update SOW Guidance is set up a little differently than Parts 1 and 2. The process for developing a Mitigation Strategy is clearly described in the Code of Federal Regulations (CFR) and FEMA's expectations are more clearly expressed.

Part 3 still includes a series of Key Decisions and related questions and activities, but the Guidance provides complete sample language that can be inserted in the SOW. If you prefer to do something different with the Plan Update, i.e., an approach you think will satisfy the CFR requirement but is more in line with how you and the Participating Jurisdictions want to work, then a placeholder is provided to insert those preferences in the SOW for consideration by the State and FEMA Region III.



PART 3: MITIGATION STRATEGY

KEY DECISION #3.1: ASSESSING CAPABILITIES

Do you know how participating jurisdictions will identify and evaluate strengths and weaknesses for planning and implementing mitigation actions?

Relevant Capabilities Include:

- Planning and Regulatory:
 - Conducting an HMP maintenance and implementation process on a sustained and continuing basis
 - Identifying and pursuing plan integration cross-training and involvement
 - Integrating local plans, policies, and programs related to ongoing operations as well as growth and development
- Administrative and Financial:
 - Understanding FEMA Hazard Mitigation Assistance (HMA) pre- and post-disaster grant programs' application and administration procedures
 - Identifying and securing funding from sources other than FEMA
- Technical:
 - Accessing, understanding, and analyzing State and FEMA data sources, either via GIS or other software applications
 - Design, engineering, and construction capabilities for implementing mitigation actions "in-house"
- Education and Outreach: Communicating risk to residents and property owners and seeking support for implementing mitigation actions

☐ YES



See Option 3.1-B for where to include the Participating Jurisdictions' preferred approach for assessing capabilities in the SOW.

☐ NO



See **ACTIVITIES**

and/or

Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in understanding how the capability assessment can be conducted during the Plan Update before completing the SOW.



Recognizing strengths in available capabilities helps identify and implement successful mitigation actions. Recognizing shortfalls helps identify technical assistance and training needs to increase or improve needed capabilities.



ACTIVITIES to Help Resolve Key Decision #3.1: Capability Assessments

First, review FEMA Region III's Local Capability Assessment Tool. The Tool provides a way to identify and evaluate capabilities. The end result is a comprehensive listing but also an assessment of strengths to capitalize on and weaknesses to address in the Plan Update.

Then, consider the following questions to see if there is any better information or approaches than provided for in the Tool.

3.1.1 Are Participating Jurisdiction's capabilities for planning and implementing mitigation actions identified in the current approved HMP?

3.1.2 Are capabilities identified in the current approved HMP:

- ✓ Still valid for the Participating Jurisdictions?
- ✓ Increased or improved for the Participating Jurisdictions?
- ✓ No longer available to the Participating Jurisdictions (due to staff changes, budget cutbacks, etc.)?

3.1.3 Is there an explanation of how these capabilities were determined in the current approved HMP (e.g., interviews or surveys with Participating Jurisdictions)? As far as you know, how successful was this technique in assessing the Participating Jurisdictions' capabilities? What method(s) will be used to assess capabilities in the Plan Update?

- If you don't better information or approaches than provided for in the Tool, use Option 3.1-A in the **SAMPLE LANGUAGE**.
- If you do find an approach you prefer, use Option 3.1-B in the **SAMPLE LANGUAGE** to articulate how the capability assessment will be conducted for the State and FEMA Region III to review.





As noted in earlier sections of this Guidance document, it is very important to remember you are only developing an SOW for the Plan Update and at this point you do not need to completely identify and/or assess all the Participating Jurisdiction's capabilities that may be considered in the Plan Update. However, capturing and saving anything that is learned while developing the SOW simply saves duplication of effort and time during the Plan Update.

KEY DECISION #3.2: DEVELOP MITIGATION GOALS

Do you know how participating jurisdictions will reflect results of the risk and capability assessments?

Describing goals is an essential step in the hazard mitigation planning process. Goal statements should provide a direct connection with:

- Problem statements identified in the Risk Assessment, including any data limitations to correct during the next 5-year HMP maintenance and implementation cycle
 - Shortfalls identified in the Capability Assessment
 - Concerns expressed by community members and partners as a result of public engagement during the implementation of the current approved HMP and during the Plan Update process
- ☐ YES  See Option 3.2-B for where to include the Participating Jurisdictions' preferred approach for developing goals in the SOW.
- ☐ NO  See **ACTIVITIES** and/or

Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in understanding how goals can be described during the Plan Update before completing the SOW.



The success and effectiveness of the Mitigation Strategy depends on a clear and concise understanding of the key issues and problems Participating Jurisdictions face, based on objective assessments of risk and capabilities and the overall goals of the community.



ACTIVITIES to Help Resolve Key Decision #3.2: Mitigation Goals

First, consider the following questions:

3.2.1 Are goals included in the current approved HMP?

3.2.2 Will new goals potentially be identified to address in the Mitigation Strategy that reflect new information resulting from the Risk and/or Capability Assessments?

3.2.3 Are there any relevant goals in the State Hazard Mitigation Plan that can be adapted for use in the Plan Update?



Aligning Participating Jurisdiction's goals for reducing risk and allocating resources with those of the State Hazard Mitigation Plan may be advantageous for future grant opportunities.


- Then, review Option 3.2-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter-indicated by your research, use that language in the SOW
- If there are changes or revisions to the approach you would prefer, insert this language in Option 3.2-B for the State and FEMA Region III to review.

KEY DECISION #3.3: IDENTIFYING AND EVALUATING ALTERNATIVE MITIGATION ACTIONS

Do you know how participating jurisdictions will determine which mitigation actions will yield the best value and most effective results within existing or projected capabilities?

The following are commonly accepted categories covering a comprehensive range of mitigation actions:

- Local Plans and Regulations
- Structure and Infrastructure Projects
- Natural Systems Protection
- Education and Awareness Programs

☐ YES  See Option 3.3-B for where to include the Participating Jurisdictions' preferred approach for identifying and evaluating alternative mitigation actions in the SOW.

☐ NO  See **ACTIVITIES** and/or

Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in understanding how alternative mitigation actions can be identified and evaluated during the Plan Update before completing the SOW.



The success and effectiveness of the Mitigation Strategy depends on identifying and objectively evaluating a comprehensive range of specific mitigation actions addressing each goal / problem statement and considering engineering feasibility, cost effectiveness, environmental implications, local capabilities, funding availability, etc.



ACTIVITIES to Help Resolve Key Decision #3.3: Alternative Mitigation Actions

First, consider the following questions:

3.3.1 As far as you know, are the mitigation actions identified in the current approved HMP:

- ✓ Completed?
- ✓ Work-in-progress? If so, do you understand the time schedule for completion and any anticipated roadblocks?
- ✓ Still pending? If so, do you understand why the mitigation action has not been pursued, e.g., no longer valid, lack of funding, change in priorities, etc.?



Ideally, the status of previously identified mitigation actions should be part of annual reviews conducted by the Participating Jurisdictions and this information readily available. As noted previously, you are only developing an SOW for the Plan Update and at this point you do not need to completely report on the status of all the Participating Jurisdiction's previously identified mitigation actions that may be included in the Plan Update. However, capturing anything that is learned while developing the SOW simply saves duplication of effort and time during the Plan Update.

3.3.2 Is there an explanation of how mitigation actions were identified and evaluated in the current approved HMP? As far as you know, how successful were these techniques?

3.3.3 What method(s) were used to identify alternative mitigation actions in the current approved HMP?

3.3.4 What method(s) were used to evaluate alternative mitigation actions and select preferred mitigation actions to include in the current approved HMP?

- Then, review Option 3.3-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter indicated by your research, use that language in the SOW.
- If there are changes or revisions to the approach you would prefer, insert this language in Option 3.3-B for the State and FEMA Region III to review.

KEY DECISION #3.4: PREPARING IMPLEMENTATION PLANS

Do you know how participating jurisdictions will complete the Plan Update and connect the results to operational reality?

- | | | | |
|--------------------------|-----|---|--|
| <input type="checkbox"/> | YES | ✓ | See Option 3.4-B for where to include the Participating Jurisdictions' preferred approach for creating implementation plans for mitigation actions in the SOW. |
| <input type="checkbox"/> | NO | ⊘ | See ACTIVITIES
and/or
Use the TA CHECKLIST to request assistance from the State and FEMA Region III in understanding how implementation plans can be created during the Plan Update before completing the SOW. |



The success and effectiveness of the Mitigation Strategy depends on a well-defined and realistic implementation plan.



ACTIVITIES to Help Resolve Key Decision #3.4: Implementation Plans

First, consider the following question:

3.4.1 Is the following identified in the current approved HMP for each Mitigation Action?

- ✓ Hazard(s) addressed
- ✓ Lead and support agencies, municipalities, and/or champions, i.e., who is responsible for implementing the mitigation action?

Note: It is not uncommon for communities to face problems that require cooperative efforts with other jurisdictions, including Federal and State agencies in addition to other local jurisdictions. In many of these situations, communities are not able to proceed without cooperation. The recommended mitigation actions should still be included in the Plan Update but may be included in a separate list of “multi-jurisdictional mitigation actions” and the identified lead agencies based on the Participating Jurisdiction’s understanding of what may be needed.

- ✓ Funding including FEMA HMA programs, if applicable, but also identifying alternative funding streams
- ✓ Schedule
- ✓ Other items to help Participating Jurisdiction implementation, e.g., identify the first or next step in the implementation process





It is not unusual to encounter uncertainty in how to proceed with implementing mitigation actions. Additional data and/or funding may be needed to clarify preferred options. However, it should always be possible to identify the “next step” in the process. Ongoing plan maintenance and implementation will provide the means to identify the follow-up efforts based on the results of each incremental step

- Then, review Option 3.4-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter-indicated by your research, use that language in the SOW.
- If there are changes or revisions to the approach you would prefer, insert this language in Option 3.4-B for the State and FEMA Region III to review.

KEY DECISION #3.5: SETTING PRIORITIES

Do you know how participating jurisdictions will represent the relative importance of each mitigation action and reflect community concerns while acknowledging that there are never enough resources to go around?

- ☐ YES  See Option 3.5-B for where to include the Participating Jurisdictions’ preferred approach for including implementation plans for mitigation actions in the SOW.
- ☐ NO  See **ACTIVITIES** and/or
Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in understanding options for setting priorities during the Plan Update before completing the SOW.



ACTIVITIES to Help Resolve Key Decision #3.5: Priorities

First, consider the following question:

3.5.1 What method(s) was used to set priorities in the current approved HMP?

- Numerical ranking
- High, medium, or low designations
- Chronologically by anticipated date of implementation, i.e., short-term versus long-term
- Other methods per community preference



Prioritization may change over time in response to changes in community characteristics and risks and/or to take advantage of available resources. Reviewing priorities for implementation should be a standard agenda item for periodic plan maintenance meetings.

Then, review Option 3.5-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter-indicated by your research, use that language in the SOW.

If there are changes or revisions to the approach you would prefer, insert this language in Option 3.5-B for the State and FEMA Region III to review.



COST IMPLICATIONS for Part 3: Mitigation Strategy

Unless a Planning Consultant is engaged as the Plan Developer, the main cost to developing the Mitigation Strategy is the time commitment of the Plan Developer and Participating Jurisdictions' Planning Team members. Rule-of-thumb estimates of these time commitments were included under Part 1: Planning Process.

In addition, regardless of when the Plan Update occurs, it will be important to anticipate the potential long-term impact of COVID-19 on local government operating budgets and the related subsequent impacts on relevant capabilities.



SAMPLE LANGUAGE to use in the Mitigation Strategy section of the SOW

Mitigation Strategy

The Plan Developer will identify, evaluate, and document implementation plans and priorities for a comprehensive array of mitigation actions with the support of the Planning Consultant and full participation of the Planning Committee and Participating Jurisdictions.

Option 3.1-A: *For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Capability Assessment*

- Capability Assessment will be conducted with all Participating Jurisdictions documenting strengths and weaknesses in relevant capabilities for planning and implementing mitigation actions under the following general categories:
 - Planning and Regulatory
 - Administrative and Financial
 - Technical
 - Education and Outreach

The Plan Developer will use FEMA Region III's Local Capability Assessment Tool to document current and anticipated changes in Participating Jurisdictions' capabilities during the next 5-year HMP maintenance and implementation cycle.

Option 3.1-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction re: Capability Assessment

- Capability Assessment will be conducted [insert description]

Option 3.2-A: For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Mitigation Goals

- Mitigation Goals will be developed to reflect:
 - Goals included in the current approved HMP dated [insert year] that are still valid
 - Problem statements identified in the Risk Assessment, including any data limitations to correct during the next 5-year HMP maintenance and implementation cycle
 - Shortfalls identified in the Capability Assessment
 - Concerns expressed by community members and partners as a result of public outreach and engagement
 - Relevant goals for reducing risk and allocating resources from the [insert State] State Hazard Mitigation Plan

Some goal statements may be applicable to multiple Participating Jurisdictions. However, goals will be reviewed and modified to meet the needs of each Participating Jurisdiction.

Option 3.2-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction re: Mitigation Goals

- Mitigation Goals will be developed [insert description]

Option 3.3-A: For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Mitigation Actions

- Mitigation Actions will be identified and evaluated per the following:
 - Previously identified mitigation actions included in the current approved HMP dated [insert year] will be reviewed and the status documented according to:
 - ✓ Completed.
 - ✓ Work-in-progress. If so, the time schedule for completion and any anticipated roadblocks will be identified.
 - ✓ Pending. If so, the reason(s) the mitigation action has not been pursued, e.g., no longer valid, lack of funding, change in priorities, etc., will be identified.

Any previously identified mitigation actions that have not been completed and are still considered valid will be carried forward in the Plan Update and evaluated using the same criteria as all newly identified alternative mitigation actions.

- Alternative mitigation actions for each goal / problem statement will be identified according to the following general categories:
 - ✓ Local Plans and Regulations
 - ✓ Structure and Infrastructure Projects
 - ✓ Natural Systems Protection
 - ✓ Education and Awareness Programs

Multiple alternative mitigation actions will be identified for each goal / problem statement that require clear differences in approaches and capabilities.

Alternatives will be considered for any previously identified mitigation actions carried over from the current approved HMP dated [insert year] to ensure any new technologies or changes in capabilities are acknowledged.

- Alternative mitigation actions will be evaluated to identify a preferred alternative for each goal / problem statement. Specific criteria for evaluation will be determined with the Steering Committee but will ensure capability for implementation and cover the following commonly accepted criteria as appropriate for the type of mitigation action:
 - ✓ Anticipated Effectiveness
 - ✓ Technical Feasibility
 - ✓ Administrative Capabilities
 - ✓ Political Will / Local Champion
 - ✓ Legal Authority
 - ✓ Environmental Constraints
 - ✓ Social Considerations
 - ✓ Other Community Objectives
 - ✓ Benefits versus Costs

Each Participating Jurisdiction will include two mitigation actions for each identified hazard.

In cases where implementation may depend on uncertain issues (e.g., funding), Participating Jurisdictions may identify contingency mitigation actions to pursue if the preferred action becomes infeasible.

Option 3.3-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction re: Mitigation Actions

- Mitigation Actions will be identified and evaluated [insert description]

Option 3.4-A: For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Implementation Plans

- Implementation Plans will be prepared for all preferred mitigation actions including:
 - Distinguishing between actions that can be pursued by the Participating Jurisdictions individually versus those that will require the cooperation of other jurisdictions
 - Identifying the following information at a minimum:
 - ✓ Hazard(s) addressed
 - ✓ Lead and support agencies, municipalities, and/or champions, i.e., who is responsible for implementing the mitigation action?
 - ✓ Funding including FEMA HMA programs, if applicable, but also identifying alternative funding streams
 - ✓ Schedule
 - ✓ Other items to help Participating Jurisdiction implementation, e.g., identify the first or next step in the implementation process

Option 3.4-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction re: Implementation Plans

- Implementation Plans will be prepared [insert description]

Option 3.5-A: For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Prioritization

- Prioritization will be established for all preferred mitigation actions. Specific criteria for establishing priorities will be determined with the Planning Committee, e.g., numerical rankings, high/medium/low designations, short-/mid-/long-range designations, etc. However, the method(s) used will reflect the

relative risk rankings from the Risk Assessment Update, the relative importance as gauged by the Planning Team for each mitigation action for risk reduction, and reflect community concerns.

Option 3.5-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction re: Prioritization

- Prioritization will be established [insert description]
- Deliverables, Review Process, and Time Schedule

Reviews of all Mitigation Strategy deliverables will be conducted by the Plan Developer as part of regular Planning Committee meetings and appropriate community outreach activities to:

- Conduct and review results of Capability Assessments
- Develop goals including confirming/validating goals included in the current approved HMP dated [insert year]
- Identify and evaluate alternative mitigation actions
- Develop implementation plans for preferred mitigation actions
- Establish priorities for identified mitigation actions

As detailed in the Letter of Agreement, each Participating Jurisdiction will:

- Provide information as requested by the Plan Developer
- Ensure community engagement in the review of Mitigation Strategy work-in-progress
- Provide timely comments for all milestone reviews



Part 4 of the Plan Update SOW Guidance is set up in a similar manner to Part 3. The requirements for Plan Adoption, Maintenance, and Implementation are clearly described in the Code of Federal Regulations (CFR) and FEMA's expectations are more clearly expressed.



As with Part 3, Part 4 still includes a series of Key Decisions and related questions and activities, but the Guidance provides complete sample language that can be inserted in the SOW. If you prefer to do something different with the Plan Update, i.e., an approach you think will satisfy the CFR requirement but is more in line with how you and the Participating Jurisdictions want to work, then a placeholder is provided to insert those preferences in the SOW for consideration by the State and FEMA Region III.



PART 4: PLAN ADOPTION, MAINTENANCE, AND IMPLEMENTATION

KEY DECISION #4.1: REVIEW, ADOPTION, AND APPROVAL OF THE PLAN UPDATE

Do you know how participating jurisdictions will ensure their eligibility for FEMA's Hazard Mitigation Assistance (HMA) grant funding and establish expectations for implementation roles and responsibilities?

- ☐ YES  See Option 4.1-B for where to include the Participating Jurisdictions' preferred approach for the review, adoption, and approval process in the SOW.
- ☐ NO  See **ACTIVITIES** and/or
Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in understanding how the plan review, adoption, and approval process works during the Plan Update before completing the SOW.



Expectations for the Participating Jurisdictions during this phase can be established in the initial Planning Process phase or even earlier while developing the SOW via the Letters of Agreement used to confirm the participation of eligible jurisdictions.

For example, if the Letters of Agreement spell out how the Adoption Resolutions will include specific plan maintenance and implementation roles and responsibilities for Participating Jurisdictions and their community partners, there should be no valid objections during this final phase.



ACTIVITIES to Help Resolve Key Decision #4.1

First, familiarize yourself with the following basic steps in the plan review, adoption, and approval process:

- A final draft Plan Update is prepared that documents the work of the Plan Owner, Plan Developer(s), and Participating Jurisdictions and also reflects the input of community partners.
- The final draft Plan Update is submitted, along with a completed Plan Review Tool (PRT), to the State Hazard Mitigation Officer (SHMO) for review. The State may require revisions based on their review.
- When the SHMO is satisfied that the Plan Update meets all of the required elements, the SHMO will submit it to FEMA Region III for review. FEMA has 45 days to complete its review. FEMA may also require revisions based on their review.
- When FEMA Region III is satisfied with the Plan Update, they will designate the Plan Update as "approvable pending adoption" (APA) and issue a completed PRT.

- The governing body of each Participating Jurisdiction must formally adopt the final APA-version of the Plan Update separately and submit the resolutions via the Plan Owner to the SHMO who will relay the documents to FEMA Region III.
- FEMA Region III then issues an approval letter via the SHMO.

Note: The PRT is organized according to the Code of Federal Regulations (CFR). The order of the review elements in the PRT is a little different from the way the planning process is presented in this document, but the overall content is the same. It is a good idea to refer to the PRT throughout the planning process to make sure all elements are accounted for in the Plan Update documentation.

Then, consider the following question:

4.1.1 Does the current approved HMP describe how Participating Jurisdictions have institutionalized roles and responsibilities for maintenance and implementation of the current HMP?

For example, is the following identified?

- Responsibility for overall coordination of plan maintenance and implementation including the requirement to provide periodic reporting to the Participating Jurisdiction's governing body on at least an annual basis
- Continuing participation in plan maintenance and implementation by the Participating Jurisdiction's governing body, agencies, and organizations during the subsequent 5-year cycle
- Specific roles and responsibilities for agencies and organizations as described in the Mitigation Strategy and the mitigation action implementation plans





It is recommended that specific positions, but not necessarily individuals, be identified within agencies and organizations so roles and responsibilities become part of job descriptions associated with those positions and further institutionalize mitigation for the Participating Jurisdictions.

It is also recommended that all of this information be spelled out specifically in the Adoption Resolution, or in an attached summary, versus simply including a blanket reference to the Plan Update. It is important that specific roles and responsibilities be a clear part of what is adopted by the resolution of the Participating Jurisdiction's governing body.

- Then, review Option 4.1-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter-indicated by your research, use that language in the SOW
- If there are changes or revisions to the approach you would prefer, insert this language in Option 4.1-B for the State and FEMA Region III to review.

KEY DECISION #4.2: PLAN MAINTENANCE

Do you know how participating jurisdictions will maintain momentum, institutionalize and integrate mitigation principles, account for changing conditions, and build on success?

- ☐ YES  See Option 4.2-B for where to include the Participating Jurisdictions' preferred approach for the plan maintenance process in the SOW.
- ☐ NO  See **ACTIVITIES** and/or
- Use the **TA CHECKLIST** to request assistance from the State and FEMA Region III in understanding how the plan maintenance process should be addressed during and after the Plan Update before completing the SOW.



Sustaining plan maintenance is vital to keeping the HMP current and ensures Participating Jurisdiction resiliency to natural hazards. A robust plan maintenance process with continuing engagement of community partners also ensures integration of mitigation with other parallel efforts to reduce duplication of efforts or lost opportunities.



ACTIVITIES to Help Resolve Key Decision #4.2

First, familiarize yourself with the main elements of the Plan Maintenance process as promoted by FEMA. These are:

- Monitoring – tracking Plan Update implementation
- Evaluating – assessing effectiveness of the Plan Update in achieving its goals and addressing identified problems
- Updating – to keep the Plan Update content current and reflective of changes in capabilities or available data, ongoing implementation of mitigation actions, subsequent disaster events, etc.

Then, consider the following questions:

4.2.1 Is there a “Plan Maintenance” process described in the current approved HMP?

If so, are the following included:

- Accountability measures spelling out roles and responsibilities for plan maintenance?
- Annual (at a minimum) meetings of key agencies and organizations with responsibilities for plan maintenance?
- Annual (at a minimum) reporting to the Participating Jurisdiction’s governing body including using templates per FEMA planning guidance?
- Opportunities for continuing involvement by community partners?
- Triggers for initiating a plan update in advance of the end of the 5-year cycle?

4.2.2 If a Plan Maintenance process is described, is it being followed during the current 5-year maintenance and implementation cycle?

If not, do you know why and how those issues will be avoided in the maintenance of the Plan Update?



It may be possible to tie in regular monitoring and evaluation activities as an additional agenda item for other regularly occurring meetings where key participants are already scheduled to attend.

- Then, review Option 4.2-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter indicated by your research, use that language in the SOW
- If there are changes or revisions to the approach you would prefer, insert this language in Option 4.2-B for the State and FEMA Region III to review.

KEY DECISION #4.3: IMPLEMENTING MITIGATION ACTIONS

Do you know how participating jurisdictions will bring the Plan Update to life?

- | | | | |
|--------------------------|-----|--|---|
| <input type="checkbox"/> | YES | | See Option 4.3-B for where to include the Participating Jurisdictions’ preferred approach for the plan implementation process in the SOW. |
| <input type="checkbox"/> | NO | | See ACTIVITIES and/or
Use the TA CHECKLIST to request assistance from the State and FEMA Region III in understanding how the plan implementation process should be addressed during and after the Plan Update before completing the SOW. |



All of the preceding phases and steps in the process don't mean much unless sustained progress is made in reducing risk through implementing mitigation actions. A sustained plan implementation effort also provides continuing opportunities for building community partnerships and maintaining community and elected official support for mitigation.



ACTIVITIES to Help Resolve Key Decision #4.3

First, familiarize yourself with how mitigation actions are implemented, including seeking and using funding under FEMA's HMA programs.



FEMA Region III has developed a Planning, Implementation, and Grants Development (PIGD) Workshop to provide guidance for the mitigation action implementation process. This workshop may be part of what is offered to support the SOW development, but it also will be useful after the Plan Update is completed and the Participating Jurisdictions undertake implementation of risk reduction measures.

Then, consider the following questions:

4.3.1 Is there a distinct "Plan Implementation" process described in the current approved HMP?

If so, are the following included and specifically related to Plan Implementation:

Note: This content may be associated with the "Plan Maintenance" discussion in the current approved HMP, and if so, some of the following may be redundant with preceding discussion in this Guidance. However, figuring out how to implement mitigation actions to actually reduce risk and improve long-term resilience is worth the extra effort.

- Accountability measures spelling out roles and responsibilities for plan implementation?
- Annual (at a minimum) meetings of key agencies and organizations with responsibilities for plan implementation?
- Annual (at a minimum) reporting to the Participating Jurisdiction's governing body including using templates per FEMA planning guidance?

4.3.2 If a Plan Implementation process is described, do you know if it was followed during the 5-year maintenance and implementation cycle? If not, do you know why and how those issues will be avoided in the implementation of the Plan Update?



It would be prudent to tie regular Plan Implementation activities with the monitoring and evaluation activities identified above under Plan Maintenance. There is some obvious overlap in these efforts. For example, tracking the implementation of mitigation actions informs the process of evaluating the effectiveness of the HMP attaining stated goals.

It is also worth considering the advantage of synchronizing regular plan implementation activities with the timing of pre-disaster grant programs, i.e., anticipating grant announcements so the key participants can consider what mitigation actions may be eligible candidates for grant applications.

- Then, review Option 4.3-A in the **SAMPLE LANGUAGE**. If there is nothing that is counter-indicated by your research, use that language in the SOW
- If there are changes or revisions to the approach you would prefer, insert this language in Option 4.3-B for the State and FEMA Region III to review.



SAMPLE LANGUAGE to use to Adopt, Maintain, and Implement the Plan

Adopt, Maintain, and Implement the Plan

The Plan Developer will secure adoption and approval of the Plan Update and document the process for subsequent plan maintenance and implementation with the support of the Planning Consultant and full participation of the Planning Committee and/or Participating Jurisdictions.

Option 4.1-A: *For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Plan Update review, adoption, and approval efforts:*

- Plan Update Review, Adoption, and Approval efforts will include:
 - A final draft Plan Update will be prepared that documents the work of the [Plan Owner], Plan Developer(s), and Participating Jurisdictions and reflects the input of community partners.
 - The final draft Plan Update will be submitted, along with a completed Plan Review Tool, to the [insert State] State Hazard Mitigation Officer (SHMO) for review. Any revisions requested by the State will be completed and the Plan Update resubmitted.
 - After the SHMO is satisfied that the Plan Update meets all of the required elements and submits the documents to FEMA Region III for review, any revisions requested by FEMA Region III will be completed and the Plan Update resubmitted.
 - After FEMA Region III is satisfied with the Plan Update and designates the Plan Update as “approvable pending adoption” (APA), an Adoption Resolution will be prepared for adoption by each Participating Jurisdiction. The Adoption Resolution will include the following:
 - ✓ Responsibility for overall coordination of plan maintenance and implementation including the requirement to provide periodic reporting to the Participating Jurisdiction’s governing body on at least an annual basis
 - ✓ Continuing participation in plan maintenance and implementation by the Participating Jurisdiction’s governing body, agencies, and organizations during the subsequent 5-year cycle
 - ✓ Specific roles and responsibilities for agencies and organizations as described in the Mitigation Strategy and the mitigation action implementation plans
 - The governing body of each Participating Jurisdiction will formally adopt the final APA-version of the Plan Update and the signed resolutions will be submitted via the [Plan Owner] to the SHMO who will relay the documents to FEMA Region III for the issuance of approval letters.

Option 4.1-B: *Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction re: Plan Update review, adoption, and approval efforts*

- Plan Update Review, Adoption, and Approval efforts will [insert description]

Option 4.2-A: *For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions re: Plan Maintenance efforts:*

- Plan Maintenance procedures will be developed to include:
 - Monitoring – to track Plan Update implementation efforts
 - Evaluating – to assess the effectiveness of the Plan Update in achieving its goals and addressing identified problems
 - Updating – to keep the Plan Update content current and reflect changes in capabilities or available data, ongoing implementation of mitigation actions, etc. and identify triggers for initiating a plan update in advance of the end of the 5-year cycle, e.g., subsequent disaster events.

Option 4.2-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction
re: Plan Maintenance efforts

- Plan Maintenance will [insert description]

Option 4.3-A: For use if no alternative language is preferred by the Plan Owner and/or Participating Jurisdictions
re: Plan Implementation efforts:

- Plan Implementation procedures will be developed to include commitments to:
 - Undertake implementation of mitigation actions according to priorities and next steps identified in the implementation plans in the Plan Update Mitigation Strategy
 - Refine implementation plans for mitigation actions based on results of incremental steps
 - Regularly review funding and mitigation grant opportunities that may affect priorities and next steps

Option 4.3-B: Placeholder for alternative language preferred by the Plan Owner and/or Participating Jurisdiction
re: Plan Implementation efforts

- Plan Implementation procedures will [insert description]
- Documentation for Plan Maintenance and Implementation procedures will include commitments to:
 - Identify and track accountability measures spelling out roles and responsibilities for plan maintenance and implementation
 - Conduct annual (at a minimum) meetings of key agencies and organizations with responsibilities for plan maintenance and implementation
 - Provide annual (at a minimum) reporting to the Participating Jurisdiction's governing body including using templates per FEMA planning guidance
 - Provide opportunities for continuing involvement by community partners
- Deliverables, Review Process, and Time Schedule

Reviews will be conducted by the Plan Developer as part of regular Planning Committee meetings and appropriate community outreach activities to review sequential Plan Update and related document versions including:

- Draft
- Final Draft
- Final APA Plan Update
- Executive Summary and Adoption Resolution for consideration by the Participating Jurisdictions' [governing bodies]

As detailed in the Letter of Agreement, each Participating Jurisdiction will:

- Provide information as requested by the Plan Developer
- Ensure community engagement in the review of Plan Update work-in-progress
- Provide timely comments for all milestone reviews