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2017 Ada County Multi-Hazard Mitigation Plan: Volume 2—Planning Partner Annexes

## **Appendix A. Planning Partner Expectations**

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# A. PLANNING PARTNER EXPECTATIONS

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## ACHIEVING DMA COMPLIANCE FOR ALL PLANNING PARTNERS

One of the goals of the multi-jurisdictional approach to hazard mitigation planning is to achieve compliance with the Disaster Mitigation Act (DMA) for all participating members in the planning effort. DMA compliance must be certified for each member in order to maintain eligibility for the benefits under the DMA. Whether our planning process generates ten individual plans or one large plan that has a chapter for each partner jurisdiction, the following items must be addressed by each planning partner to achieve DMA compliance:

- **Participate in the process.** It must be documented in the plan that each planning partner “participated” in the process that generated the plan. There is flexibility in defining “participation”. Participation can vary based on the type of planning partner (i.e.: City or County, vs. a Special Purpose District). However, the level of participation must be defined and the extent for which this level of participation has been met for each partner must be contained in the plan context.
- **Consistency Review.** Review of existing documents pertinent to each jurisdiction to identify policies or recommendations that are not consistent with those documents reviewed in producing the “parent” plan or have policies and recommendations that complement the hazard mitigation initiatives selected (i.e.: comp plans, basin plans or hazard specific plans).
- **Action Review.** For Plan updates, a review of the strategies from your prior action plan to determine those that have been accomplished and how they were accomplished; and why those that have not been accomplished were not completed.
- **Update Localized Risk Assessment.** Personalize the Risk Assessment for each jurisdiction by removing hazards not associated with the defined jurisdictional area or redefining vulnerability based on a hazard’s impact to a jurisdiction. This phase will include:
  - A ranking of the risk
  - A description of the number and type of structures at risk
  - An estimate of the potential dollar losses to vulnerable structures
  - A general description of land uses and development trends within the community, so that mitigation options can be considered in future land use decisions.
- **Capability assessment.** Each planning partner must identify and review their individual regulatory, technical and financial capabilities with regards to the implementation of hazard mitigation actions.
- **Personalize mitigation recommendations.** Identify and prioritize mitigation recommendations specific to the each jurisdiction’s defined area.
- **Create an Action Plan.**
- **Incorporate Public Participation.** Each jurisdiction must present the Plan to the public for comment at least once, within two weeks prior to adoption.
- Plan must be adopted by each jurisdiction.

One of the benefits to multi-jurisdictional planning is the ability to pool resources. This means more than monetary resources. Resources such as staff time, meeting locations, media resources, technical expertise will all

need to be utilized to generate a successful plan. In addition, these resources can be pooled such that decisions can be made by a peer group applying to the whole and thus reducing the individual level of effort of each planning partner. This will be accomplished by the formation of a steering committee made up of planning partners and other “stakeholders” within the planning area. The size and makeup of this steering committee will be determined by the planning partnership. This body will assume the decision making responsibilities on behalf of the entire partnership. This will streamline the planning process by reducing the number of meetings that will need to be attended by each planning partner. The assembled Steering Committee for this effort will meet monthly on an as needed basis as determined by the planning team, and will provide guidance and decision making during all phases of the plan’s development.

With the above participation requirements in mind, each partner is expected to aid this process by being prepared to develop its section of the plan. To be an eligible planning partner in this effort, each Planning Partner shall provide the following:

1. A “Letter of Intent to participate” or Resolution to participate to the Planning Team (see exhibit A).
2. Designate a lead point of contact for this effort. This designee will be listed as the hazard mitigation point of contact for your jurisdiction in the plan.
3. Support and participate in the selection and function of the Steering Committee selected to oversee the development of this plan.
4. Provide support in the form of mailing list, possible meeting space, and public information materials, such as newsletters, newspapers or direct mailed brochures, required to implement the public involvement strategy developed by the Steering Committee.
5. Participate in the process. There will be many opportunities as this plan evolves to participate. Opportunities such as:
  - a. Steering Committee meetings
  - b. Public meetings or open houses
  - c. Workshops/ Planning Partner specific training sessions
  - d. Public review and comment periods prior to adoption

At each and every one of these opportunities, attendance will be recorded. Attendance records will be used to document participation for each planning partner. No thresholds will be established as minimum levels of participation. However, each planning partner should attempt to attend all possible meetings and events.

1. There will be one **mandatory** workshop that all planning partners will be required to attend. This workshop will cover the proper completion of the jurisdictional annex template which is the basis for each partner’s jurisdictional chapter in the plan. Failure to have a representative at this workshop will disqualify the planning partner from participation in this effort. The schedule for this workshop will be such that all committed planning partners will be able to attend.
2. After participation in the mandatory template workshop, each partner will be required to complete their template and provide it to the planning team in the time frame established by the Steering Committee. Failure to complete your template in the required time frame may lead to disqualification from the partnership.
3. Each partner will be expected to perform a “consistency review” of all technical studies, plans, ordinances specific to hazards to determine the existence of any not consistent with the same such documents reviewed in the preparation of the County (parent) Plan. For example, if your community has a floodplain management plan that makes recommendations that are not consistent with any of the County’s Basin Plans, that plan will need to be reviewed for probable incorporation into the plan for your area.
4. Each partner will be expected to review the Risk Assessment and identify hazards and vulnerabilities specific to its jurisdiction. Contract resources will provide the jurisdiction specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.

5. Each partner will be expected to review and determine if the mitigation recommendations chosen in the parent plan will meet the needs of its jurisdiction. Projects within each jurisdiction consistent with the parent plan recommendations will need to be identified and prioritized, and reviewed to determine their benefits vs. costs.
6. Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.
7. Each partner will be required to sponsor at least one public meeting to present the draft plan to its constituents at least 2 weeks prior to adoption.
8. Each partner will be required to formally adopt the plan.

Templates and instructions to aid in the compilation of this information will be provided to all committed planning partners. Each partner will be expected to complete their templates in a timely manner and according to the timeline specified by the Steering Committee.

**\*\* Note\*\*:** Once this plan is completed, and DMA compliance has been determined for each partner, maintaining that eligibility will be dependent upon each partner implementing the plan implementation-maintenance protocol identified in the plan. At a minimum, this means completing the ongoing plan maintenance protocol identified in the plan. Partners that do not participate in this plan maintenance strategy may be deemed ineligible by the partnership, and thus lose their DMA eligibility.

## EXHIBIT A. EXAMPLE LETTER OF INTENT TO PARTICIPATE

Ada County Hazard Mitigation Planning Partnership  
C/O Rob Flaner, Tetra Tech, Inc.  
90 South Blackwood Ave.  
Eagle, ID 83616

Dear Ada County Planning Partnership,

Please be advised that the \_\_\_\_\_ (insert City or district name) is committed to participating in the update to the Ada County Hazard Mitigation Plan. As the jurisdictional representative tasked with this planning effort, I certify that we will commit all necessary resources in order to meet Partnership expectations as outlined in the “Planning Partners expectations” document provided by the planning team, in order to obtain Disaster Mitigation Act (DMA) compliance for our jurisdiction.

Mr./Ms. \_\_\_\_\_ will be our jurisdiction’s point of contact for this process and they can be reached at (*insert: address, phone number and e-mail address*).

Sincerely,

Name \_\_\_\_\_

Title \_\_\_\_\_

## EXHIBIT B. PLANNING TEAM CONTACT INFORMATION

Name	Representing	Address	Phone	e-mail
Doug Hardman	ACEM	7200 Barrister Dr. Boise, ID 83704	(208)577-4750	<a href="mailto:dhardman@adaweb.net">dhardman@adaweb.net</a>
Paul (Crash) Marusich	ACEM	7200 Barrister Dr. Boise, ID 83704	(208)577-4750	<a href="mailto:pmarusich@adaweb.net">pmarusich@adaweb.net</a>
Rob Flaner	Tetra Tech, Inc.	90 S. Blackwood Ave Eagle, ID 83616	(208) 939-4391	<a href="mailto:Rob.flaner@tetrattech.com">Rob.flaner@tetrattech.com</a>
Carol Bauman	Tetra Tech, Inc.	1020 SW Taylor St., Ste. 530 Portland, Oregon 97205	(503) 223-5388	<a href="mailto:Carol.Baumann@tetrattech.com">Carol.Baumann@tetrattech.com</a>
Stephen Veith	Tetra Tech, Inc.	1020 SW Taylor St., Ste. 530 Portland, Oregon 97205	(503) 223-5388	<a href="mailto:Stephen.veith@tetrattech.com">Stephen.veith@tetrattech.com</a>

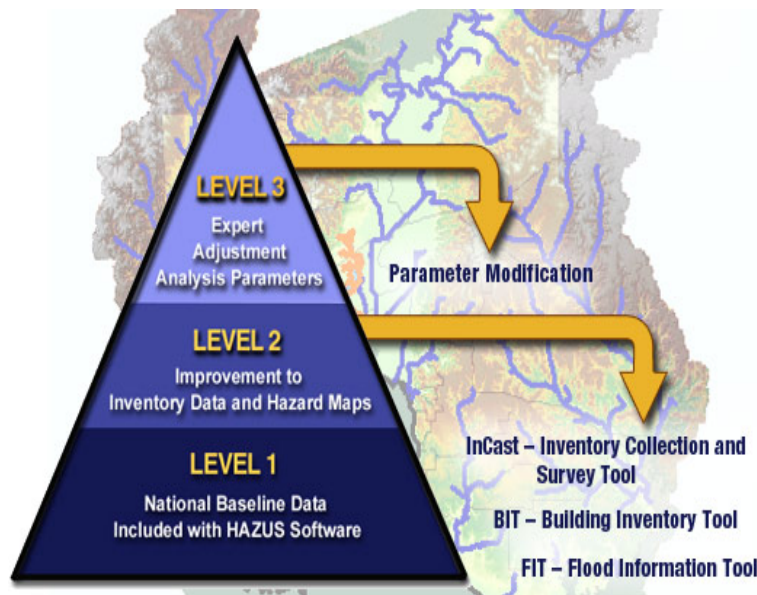
## EXHIBIT C. OVERVIEW OF HAZUS

### Overview of HAZUS-MH (Multi-Hazard)

[http://www.fema.gov/hazus/dl\\_mhpres.shtm](http://www.fema.gov/hazus/dl_mhpres.shtm) HAZUS-MH, is a nationally applicable standardized methodology and software program that contains models for estimating potential losses from earthquakes, floods, and hurricane winds. HAZUS-MH was developed by the Federal Emergency Management Agency (FEMA) under contract with the National Institute of Building Sciences (NIBS). NIBS maintains committees of wind, flood, earthquake and software experts to provide technical oversight and guidance to HAZUS-MH development. Loss estimates produced by HAZUS-MH are based on current scientific and engineering knowledge of the effects of hurricane winds, floods, and earthquakes. Estimating losses is essential to



decision-making at all levels of government, providing a basis for developing mitigation plans and policies, emergency preparedness, and response and recovery planning.



HAZUS-MH uses state-of-the-art geographic information system (GIS) software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of hurricane winds, floods, and earthquakes on populations. The latest release, HAZUS-MH MR1, is an updated version of HAZUS-MH that incorporates many new features which improve both the speed and functionality of the models. For information on software and hardware requirements to run HAZUS-MH MR1, see [HAZUS-MH Hardware and Software Requirements](#).

### HAZUS-MH Analysis Levels

HAZUS-MH provides for three levels of analysis:

- A **Level 1** analysis yields a rough estimate based on the nationwide database and is a great way to begin the risk assessment process and prioritize high-risk communities.
- A **Level 2** analysis requires the input of additional or refined data and hazard maps that will produce more accurate risk and loss estimates. Assistance from local emergency management personnel, city planners, GIS professionals, and others may be necessary for this level of analysis.
- A **Level 3** analysis yields the most accurate estimate of loss and typically requires the involvement of technical experts such as structural and geotechnical engineers who can modify loss parameters based on to the specific conditions of a community. This level analysis will allow users to supply their own techniques to study special conditions such as dam breaks and tsunamis. Engineering and other expertise is needed at this level.





Three data input tools have been developed to support data collection. The [Inventory Collection Tool \(InCAST\)](#) helps users collect and manage local building data for more refined analyses than are possible with the national level data sets that come with HAZUS. InCAST has expanded capabilities for multi-hazard data collection. HAZUS-MH includes an enhanced Building Inventory Tool (BIT) allows users to import building data and is most useful when handling large datasets, such as tax assessor records. The [Flood Information Tool \(FIT\)](#) helps users manipulate flood data into the format required by the HAZUS flood model. All Three tools are included in the HAZUS-MH MR1 Application DVD.

## HAZUS-MH Models

The **HAZUS-MH Hurricane Wind Model** gives users in the Atlantic and Gulf Coast regions and Hawaii the ability to estimate potential damage and loss to residential, commercial, and industrial buildings. It also allows users to estimate direct economic loss, post-storm shelter needs and building debris. In the future, the model will include the capability to estimate wind effects in island territories, storm surge, indirect economic losses, casualties, and impacts to utility and transportation lifelines and agriculture. Loss models for other severe wind hazards will be included in the future. [Details about the Hurricane Wind Model.](#)

The **HAZUS-MH Flood Model** is capable of assessing riverine and coastal flooding. It estimates potential damage to all classes of buildings, essential facilities, transportation and utility lifelines, vehicles, and agricultural crops. The model addresses building debris generation and shelter requirements. Direct losses are estimated based on physical

damage to structures, contents, and building interiors. The effects of flood warning are taken into account, as are flow velocity effects. [Details about the Flood Model.](#)

The **HAZUS-MH Earthquake Model**, The HAZUS earthquake model provides loss estimates of damage and loss to buildings, essential facilities, transportation and utility lifelines, and population based on scenario or probabilistic earthquakes. The model addresses debris generation, fire-following, casualties, and shelter requirements. Direct losses are estimated based on physical damage to structures, contents, inventory, and building interiors. The earthquake model also includes the Advanced Engineering Building Module for single- and group-building mitigation analysis. [Details about the Earthquake Model.](#)

The updated earthquake model released with HAZUS-MH includes:

- The (September 2002) National Hazard Maps
- Project '02 attenuation functions
- Updated historical earthquake catalog (magnitude 5 or greater)
- Advanced Engineering Building Module for single and group building mitigation analysis

Additionally, HAZUS-MH can perform multi-hazard analysis by providing access to the average annualized loss and probabilistic results from the hurricane wind, flood, and earthquake models and combining them to provide integrated multi-hazard reports and graphs. HAZUS-MH also contains a third-party model integration capability that provides access and operational capability to a wide range of natural, man-made, and technological hazard models (nuclear and conventional blast, radiological, chemical, and biological) that will supplement the natural hazard loss estimation capability (hurricane wind, flood, and earthquake) in HAZUS-MH.



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## **Appendix B. Procedures for Linking to This Plan**

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## B. PROCEDURES FOR LINKING TO THIS PLAN

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Not all eligible local governments within Ada County are included in the Ada County Multi-Hazard Mitigation Plan Update. It is assumed that some or all of these non-participating local governments may choose to “link” to the Plan at some point to gain eligibility for programs under the federal Disaster Mitigation Act. In addition, some of the current partnership may not continue to meet eligibility requirements due to a lack of participation as prescribed by the plan. The following “linkage” procedures define the requirements established by the Plan’s Steering Committee and all planning partners for dealing with an increase or decrease in the number of planning partners linked to this plan. It should be noted that a currently non-participating jurisdiction within the defined planning area is not obligated to link to this plan. These jurisdictions can choose to do their own “complete” plan that addresses all required elements of section 201.6 of 44 CFR.

### INCREASING THE PARTNERSHIP THROUGH LINKAGE

The annual time period for the linkage process will be from January to May during any year. Eligible linking jurisdictions are instructed to complete all of the following procedures during this time frame:

- The eligible jurisdiction requests a “Linkage Package” by contacting the Point of Contact (POC) for the plan:
  - Name
  - Title
  - Address
  - City, State ZIP
  - Phone
  - e-mailThe POC will provide a linkage packages that includes:
  - Copy of Volume 1 and 2 of the plan
  - Planning partner’s expectations package.
  - A sample “letter of intent” to link to the Multi-Hazard Mitigation Plan.
  - A Special Purpose District or City template and instructions.
  - Catalog of Hazard Mitigation Alternatives
  - A “request for technical assistance” form.
  - A copy of Section 201.6 of Chapter 44, the Code of Federal Regulations, which defines the federal requirements for a local hazard mitigation plan.
- The new jurisdiction will be required to review both volumes of the Multi-Hazard Mitigation Plan, which includes the following key components for the planning area:
  - The planning area risk assessment
  - Goals and objectives
  - Plan implementation and maintenance procedures
  - Comprehensive review of alternatives

➤ County-wide initiatives.

Once this review is complete, the jurisdiction will complete its specific annex using the template and instructions provided by the POC. Technical assistance can be provided upon request by completing the request for technical assistance (TA) form provided in the linkage package. This TA may be provided by the POC or any other resource within the Planning Partnership such as a member of the Steering Committee or a currently participating City or Special Purposes District partner. The POC will determine who will provide the TA and the possible level of TA based on resources available at the time of the request.

- The new jurisdiction will be required to develop a public involvement strategy that ensures the public’s ability to participate in the plan development process. At a minimum, the new jurisdiction must make an attempt to solicit public opinion on hazard mitigation at the onset of this linkage process and a minimum of one public meeting to present their draft jurisdiction specific annex for comment, prior to adoption by the governing body. The Planning Partnership will have resources available to aid in the public involvement strategy such as the Plan website. However, it will be the new jurisdiction’s responsibility to implement and document this strategy for incorporation into its annex. It should be noted that the Jurisdictional Annex templates do not include a section for the description of the public process. This is because the original partnership was covered under a uniform public involvement strategy that covered the planning area described in Volume 1 of the plan. Since new partners were not addressed by that strategy, they will have to initiate a new strategy, and add a description of that strategy to their annex. For consistency, new partners are encouraged to follow the public involvement format utilized by the initial planning effort as described in Volume 1 of the plan.
- Once their public involvement strategy is completed and they have completed their template, the new jurisdiction will submit the completed package to the POC for a pre-adoption review to ensure conformance with the Regional plan format.
- The POC will review for the following:
  - Documentation of Public Involvement strategy
  - Conformance of template entries with guidelines outlined in instructions
  - Chosen initiatives are consistent with goals, objectives and mitigation catalog of the Multi-Hazard Mitigation Plan Update
  - A Designated point of contact
  - A ranking of risk specific to the jurisdiction.

The POC may utilize members of the Steering Committee or other resources to complete this review. All proposed linked annexes will be submitted to the Steering Committee for review and comment prior to submittal to the Idaho Office of Emergency Management (IOEM).

- Plans approved and accepted by the Steering Committee will be forwarded to IOEM for review with a cover letter stating the forwarded plan meets local approved plan standards and whether the plan is submitted with local adoption or for criteria met/plan not adopted review.
- IOEM will reviews plans for federal compliance. Non-Compliant plans are returned to the Lead agency for correction. Compliant plans are forwarded to FEMA for review with annotation as to the adoption status.
- FEMA reviews the new jurisdiction’s plan in association with the approved plan to ensure DMA compliance. FEMA notifies new jurisdiction of results of review with copies to IOEM and approved planning authority.
- New jurisdiction corrects plan shortfalls (if necessary) and resubmits to IOEM through the approved plan lead agency.

- For plans with no shortfalls from the FEMA review that have not been adopted, the new jurisdiction governing authority adopts the plan (if not already accomplished) and forwards adoption resolution to FEMA with copies to lead agency and IOEM.
- FEMA regional director notifies new jurisdiction governing authority of plan approval.

The new jurisdiction plan is then included with the regional plan with the commitment from the new jurisdiction to participate in the ongoing plan implementation and maintenance.

## DECREASING THE PARTNERSHIP

The eligibility afforded under this process to the planning partnership can be rescinded in two ways. First, a participating planning partner can ask to be removed from the partnership. This may be done because the partner has decided to develop its own plan or has identified a different planning process for which it can gain eligibility. A partner that wishes to voluntarily leave the partnership shall inform the POC of this desire in writing. This notification can occur any time during the calendar year. A jurisdiction wishing to pursue this avenue is advised to make sure that it is eligible under the new planning effort, to avoid any period of being out of compliance with the Disaster Mitigation Act.

After receiving this notification, the POC shall immediately notify both IOEM and FEMA in writing that the partner in question is no longer covered by the Multi-Hazard Mitigation Plan, and that the eligibility afforded that partner under this plan should be rescinded based on this notification.

The second way a partner can be removed from the partnership is by failure to meet the participation requirements specified in the “Planning Partner Expectations” package provided to each partner at the beginning of the process, or the plan maintenance and implementation procedures specified in Volume 1 of the plan. Each partner agreed to these terms by adopting the plan.

Eligibility status of the planning partnership will be monitored by the POC. The determination of whether a partner is meeting its participation requirements will be based on the following parameters:

- Are progress reports being submitted annually by the specified time frames?
- Are partners notifying the POC of changes in designated points of contact?
- Are the partners supporting the Steering Committee by attending designated meetings or responding to needs identified by the body?
- Are the partners continuing to be supportive as specified in the Planning Partners expectations package provided to them at the beginning of the process?

Participation in the plan does not end with plan approval. This partnership was formed on the premise that a group of planning partners would pool resources and work together to strive to reduce risk within the planning area. Failure to support this premise lessens the effectiveness of this effort. The following procedures will be followed to remove a partner due to the lack of participation:

- The POC will advise the Steering Committee of this pending action and provide evidence or justification for the action. Justification may include: multiple failures to submit annual progress reports, failure to attend meetings determined to be mandatory by the Steering Committee, failure to act on the partner’s action plan, or inability to reach designated point of contact after a minimum of five attempts.
- The Steering Committee will review information provided by POC, and determine action by a vote. The Steering Committee will invoke the voting process established in the ground rules established during the formation of this body.
- Once the Steering Committee has approved an action, the POC will notify the planning partner of the pending action in writing via certified mail. This notification will outline the grounds for the action, and

ask the partner if it is their desire to remain as a partner. This notification shall also clearly identify the ramifications of removal from the partnership. The partner will be given 30 days to respond to the notification.

- Confirmation by the partner that they no longer wish to participate or failure to respond to the notification shall trigger the procedures for voluntary removal discussed above.
- Should the partner respond that they would like to continue participation in the partnership, they must clearly articulate an action plan to address the deficiencies identified by the POC. This action plan shall be reviewed by the Steering Committee to determine whether the actions are appropriate to rescind the action. Those partners that satisfy the Steering Committee's review will remain in the partnership, and no further action is required.
- Automatic removal from the partnership will be implemented for partners where these actions have to be initiated more than once in a 5 year planning cycle.



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## **Appendix C. Annex Instructions and Templates**

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# 1. INSTRUCTIONS FOR COMPLETING MUNICIPALITY ANNEX TEMPLATE

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The jurisdictional annex templates for the 2016 Clark County Hazard Mitigation Plan will be completed in three phases. **This document provides instructions for completing all phases of the template for municipalities.**

**If your jurisdiction completed and submitted Phase 1 and Phase 2,** Phase 3 has been added to the end of your annex to date. Any planning team comments, questions or suggestions have been included as blue highlighted notes and/or comments. Any text edits were made via track changes. Any yellow highlights indicate areas where missing information should be filled in. Phase 3 instructions begin on page 8.

**If your jurisdiction did not complete Phase 1 or Phase 2,** please complete all phases at this time.

**Completed, draft templates should be completed by Friday, April 15, 2016. If you will not be able to meet this deadline, you must let the planning team know by April 8, 2016.**

**Any questions on completing the template should be directed to:**

Kristen Gelino  
Tetra Tech, Inc.  
(646) 576-4029  
e-mail: [Kristen.gelino@tetrattech.com](mailto:Kristen.gelino@tetrattech.com)

## Municipality Annex:

This document provides instructions for completing all phases of the jurisdictional annex template for municipalities. **Phase 3 templates should be completed by Friday, April 15, 2016. If you will not be able to meet this deadline, you must let the planning team know by April 8, 2016.**

### *Associated Documents:*

Phas32\_MUNICIPALITYNAME.dotm  
ClarkCo\_2016HMP\_Toolkit

## A Note About Formatting:

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner. Partners who do not have Microsoft Word capability may prepare the document in other formats, and the planning team will convert it to the Word format.

Content should be entered within the yellow, highlighted text that is currently in the template, rather than creating text in another document and pasting it into the template. Text from another source will alter the style and formatting of the document.

The numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of this numbering.

## PHASE 1 STARTS HERE

### CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your municipality (City of Owen, West County, etc.). Please do not change the chapter number. Revise only the jurisdiction name.

### HAZARD MITIGATION PLAN POINT OF CONTACT

Please provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

*Note: Both contacts should match the contacts designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, please let the planning team know by inserting a comment into the document.*

### JURISDICTION PROFILE

Provide information specific to your jurisdiction, in a style similar to the example provided in the box at right. This should be information not be provided in the overall mitigation plan document. For population, use the most current data for your jurisdiction from an official source (e.g., the U.S. Census or state office of financial management).

#### Example Jurisdiction Profile:

- **Date of Incorporation**—1858
- **Current Population**—17,289 as of July 2014 (2014 Department of Finance estimates)
- **Population Growth**—Based on the state data, Smithburg has experienced a relatively flat rate of growth. The overall population has increased 3.4% since 2010 and growth averaged 0.74% per year from 2000 to 2014.
- **Location and Description**—The City of Smithburg is on the Pacific coast, 275 miles south of Portland. Smithburg is the home of Smithburg State University and is situated between the communities of Murphy to the north and Blue Lake to the east. It sits at the intersection of State Routes 101 and 299.
- **Brief History**—The Smithburg area was settled in the 1850s as a supply center for miners. Timber later became the area's major economic resource. Smithburg was incorporated in 1858 and by 1913 Smithburg College was founded. Recently, the presence of the college has come to shape Smithburg's population into a young, liberal, and educated crowd.
- **Climate**—Smithburg's weather is typical of the Northern California coast, with mild summers and cool, wet winters. It rarely freezes in the winter and it is rarely hot in the summer. Annual average rainfall is over 40 inches, with 80% of that falling from November through April. The average year-round temperature is 59°F. Humidity averages 72 to 87 percent. Prevailing winds are from the north, and average 5 mph.
- **Governing Body Format**—The City is governed by a five-member city council. The City consists of three departments: Finance, Environmental Services, and Community Development. The City has 13 committees, commissions and task forces, which report to the City Council. The City Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.
- **Development Trends**—Anticipated development levels for Smithburg are low to moderate, consisting primarily of residential development. The majority of recent development has been infill, with a focus on affordable housing. The 2012 City of Smithburg general plan focuses on issues of the greatest concern to the community. City actions, such as those relating to land use allocations, annexations, zoning, subdivision, and capital improvements, must be consistent with the plan. Future growth and development in the City will be managed as identified in the general plan.

## PHASE 2 STARTS HERE

### CAPABILITY ASSESSMENT

**Please note that it is unlikely that you will be able to complete all sections of this phase on your own. You will likely need to reach out to other departments within your local government such as planning, finance, public works, etc. When reaching out to these individuals, you may want to provide them with a little background information about this planning process as you will certainly want some input/feedback during phase 3 of your annex development – selecting mitigation actions.**

#### Legal and Regulatory Capability

Describe the legal authorities available to your jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that can support hazard mitigation actions. In the table titled “Legal and Regulatory Capability,” indicate “Yes” or “No” for each listed code, ordinance, requirement or planning document in each of the following columns:

- **Local Authority**—Enter “Yes” if your jurisdiction has prepared or adopted the identified item; otherwise, enter “No.” If yes, then enter the code, ordinance number, or plan name and its date of adoption in the comments column.
- **Other Jurisdiction Authority**—Enter “Yes” if there are any regulations that may impact your action that are enforced or administered by another agency (e.g., a state agency or special purpose district) or if you know that there are any state or federal regulations or laws that would prohibit local implementation of the identified item; otherwise, enter “No.” Note - If you answer yes, please indicate the other agency in the comments.
- **State Mandated**—Enter “Yes” if state laws or other requirements enable or require the listed item to be implemented at the local level; otherwise, enter “No.”
- **Comments**—Enter the code number and adoption date for any local code indicated as being in place; provide other comments as appropriate to describe capabilities for each entry.
- For the categories “General or Comprehensive Plan” and “Capital Improvement Plan,” answer the specific questions shown, in addition to completing the four columns indicating level of capability.

The table on the following page provides information and resources that may be helpful to you in completing the legal and regulatory capability table in you annex.

Legal and Regulatory Capability – Helpful Information	
Additional Information	
<b>Codes, Ordinances &amp; Requirements</b>	
Building Code	The State Building Code is the minimum requirements for all local jurisdictions in the State. Local jurisdictions may enforce more stringent standards. The latest version of the WA State Code became effective on July 1, 2013 (Chapter 19.27 RCW). It is recommended that building codes are adopted locally.  <b>Resource:</b> <a href="http://mrsc.org/Home/Stay-Informed/MRSC-Insight/February-2013/New-Building-Codes-Go-Into-Effect-on-July-1,-2013.aspx">http://mrsc.org/Home/Stay-Informed/MRSC-Insight/February-2013/New-Building-Codes-Go-Into-Effect-on-July-1,-2013.aspx</a>
Zoning Code	You may have a unified development code or separate ordinances for zoning, subdivision, etc. Clark County is a GMA community.  <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Development-Regulations-and-Zoning.aspx">http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Development-Regulations-and-Zoning.aspx</a>
Subdivisions	The subdivision of land into lots is governed in Washington State by chapter 58.17 RCW and by city and county ordinances adopted under that chapter's authority.  <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Subdivisions.aspx">http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Subdivisions.aspx</a>
Stormwater Management	Under Clean Water Act regulations, local governments in the Puget Sound Basin and those subject to the federal National Pollutant Discharge Elimination System (NPDES) Storm Water Program are required to have stormwater management programs. As authorized by the Clean Water Act, the U.S. Environmental Protection Agency's NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.  <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Environment/Water-Topics/Storm-and-Surface-Water-Management.aspx">http://mrsc.org/Home/Explore-Topics/Environment/Water-Topics/Storm-and-Surface-Water-Management.aspx</a> Map - <a href="http://waecy.maps.arcgis.com/home/item.html?id=df7f487bf29b4c24bf195146f22c3cb5">http://waecy.maps.arcgis.com/home/item.html?id=df7f487bf29b4c24bf195146f22c3cb5</a>
Post-Disaster Recovery	One action a community can take to move toward better management of disaster mitigation, preparedness, response, and recovery is the adoption of an ordinance before or after a damaging event to serve as either a forerunner or supplement to a full-blown recovery plan.  <b>Resource:</b> <a href="https://www.planning.org/research/postdisaster/pdf/modelrecoveryordinance.pdf">https://www.planning.org/research/postdisaster/pdf/modelrecoveryordinance.pdf</a>
Real Estate Disclosure	This is referring to real estate disclosure pertaining to natural hazards. There has been some recent legislation in WA State impacting this information.  <b>Resource:</b> <a href="http://mrsc.org/Home/Stay-Informed/MRSC-Insight/September-2015/New-Property-Disclosure-Requirements-Will-Impact-S.aspx">http://mrsc.org/Home/Stay-Informed/MRSC-Insight/September-2015/New-Property-Disclosure-Requirements-Will-Impact-S.aspx</a>
Growth Management	Clark County is a required Growth Management Act planning community. Local jurisdictions should have implementing laws for their Comprehensive Plans.  <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Development-Regulations-and-Zoning.aspx">http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Development-Regulations-and-Zoning.aspx</a>
Site Plan Review	Site plans include general site plan review and binding site plans  <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Site-Plans-and-Binding-Site-Plans.aspx">http://mrsc.org/Home/Explore-Topics/Planning/Development-Regulations/Site-Plans-and-Binding-Site-Plans.aspx</a>
Environmental Protection	This refers to critical areas and SEPA and/or Shoreline Management and anything specific to your jurisdiction as appropriate.  <b>Resource:</b> Critical Areas: <a href="http://mrsc.org/Home/ExploreTopics/Environment/Critical-Areas-and-Species/Critical-Areas.aspx">http://mrsc.org/Home/ExploreTopics/Environment/Critical-Areas-and-Species/Critical-Areas.aspx</a>  SEPA: <a href="http://mrsc.org/Home/Explore-Topics/Environment/Environmental-Laws/State-Environmental-Policy-Act.aspx">http://mrsc.org/Home/Explore-Topics/Environment/Environmental-Laws/State-Environmental-Policy-Act.aspx</a>  Shoreline Management: <a href="http://www.ecy.wa.gov/programs/sea/shorelines/smp/status.html">http://www.ecy.wa.gov/programs/sea/shorelines/smp/status.html</a>

Additional Information	
Flood Damage Prevention	All National Flood Insurance Program participating communities are required to have a flood damage prevention ordinance. <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Flood-Hazard-Management-Planning-(1).aspx">http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Flood-Hazard-Management-Planning-(1).aspx</a>
Emergency Management	Each local government in Washington State is authorized and directed to establish a local organization or to be a member of a joint local organization for emergency management in accordance with the state comprehensive emergency management plan and program (see RCW 38.52.070). <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Emergency-Management-and-Disaster-Planning/Emergency-Planning-at-the-Local-Government-Level.aspx">http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Emergency-Management-and-Disaster-Planning/Emergency-Planning-at-the-Local-Government-Level.aspx</a>
Climate Change Adaptation	This refers to any local ordinances that you may have that require that you examine or plan for climate change adaptation. It is unlikely that you have such laws currently on the books. An example from California is below. <b>Resource:</b> <a href="https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB379">https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB379</a>
Other	Please provide any other ordinance that you think is relevant to the hazard mitigation plan. An example might be a bulkhead ordinance or a public health and safety ordinance or a Continuity of Operations or Emergency Declaration Authority. <b>Resource:</b>
<b>Planning Documents</b>	
General or Comprehensive Plan	You may also want to list out any optional elements. Local comprehensive plans must include the following elements: land use, housing, capital facilities, utilities, transportation, and, for counties, a rural element. Shoreline master program policies are also an element of local comprehensive plans. Implementation of required parks and economic development elements is on hold until adequate state funding is available. Local comprehensive plans may also include optional elements. (See RCW 36.70A.080.) <i>Is the plan equipped to provide linkage to this mitigation plan?</i> Does the plan include information from the HMP and/or is the HMP included by reference? <b>Resource:</b>
Capital Improvement Plan	Each jurisdiction should have a CIP. <b>Resource:</b> <a href="http://www.commerce.wa.gov/Services/localgovernment/GrowthManagement/Capital-Facilities/Pages/default.aspx">http://www.commerce.wa.gov/Services/localgovernment/GrowthManagement/Capital-Facilities/Pages/default.aspx</a>
Floodplain or Watershed Plan	This might be a CRS Floodplain Management Plan or a Watershed Management Plan or a Comprehensive Flood Control Management Plan <b>Resource:</b> <a href="http://www.ecy.wa.gov/programs/eap/wrias/Planning/27-28.html">http://www.ecy.wa.gov/programs/eap/wrias/Planning/27-28.html</a> <a href="http://app.leg.wa.gov/RCW/default.aspx?cite=86.12.200">http://app.leg.wa.gov/RCW/default.aspx?cite=86.12.200</a>
Stormwater Plan	You will probably have a Stormwater Management Plan if you are a NPDES permittee. <b>Resource:</b> For example - <a href="http://www.cityofvancouver.us/publicworks/page/stormwater-management-plan">http://www.cityofvancouver.us/publicworks/page/stormwater-management-plan</a>
Habitat Conservation Plan	This is a specific plan relating to endangered species. <b>Resource:</b> <a href="http://www.fws.gov/endangered/esa-library/pdf/hcp.pdf">http://www.fws.gov/endangered/esa-library/pdf/hcp.pdf</a>
Economic Development Plan	Clark County belongs to the Oregon-based Portland Regional Partners Council of Economic Development. If you have a specific economic development plan, please include. <b>Resource:</b>
Shoreline Management Plan	Over 260 towns, cities and counties are required to comprehensively update their Shoreline Master Programs. Most local programs have not been fully updated in over 30 years. <b>Resource:</b> <a href="http://www.ecy.wa.gov/programs/sea/shorelines/smp/status.html">http://www.ecy.wa.gov/programs/sea/shorelines/smp/status.html</a>

Additional Information	
Community Wildfire Protection Plan	I don't believe any Clark jurisdictions have a CWPP. If you have a related plan, please list below. <b>Resource:</b> <a href="http://www.dnr.wa.gov/programs-and-services/wildfire/wildfire-preparedness/community-wildfire-protection">http://www.dnr.wa.gov/programs-and-services/wildfire/wildfire-preparedness/community-wildfire-protection</a>
Forest Management Plan	These refer to a variety of plans for urban and rural forests and street trees. <b>Resource:</b> Urban - <a href="http://mrsc.org/Home/Explore-Topics/Environment/Natural-Resources-Topics/Urban-Forestry.aspx">http://mrsc.org/Home/Explore-Topics/Environment/Natural-Resources-Topics/Urban-Forestry.aspx</a> Rural - <a href="http://www.clark.wa.gov/environment/documents/camp_bonneville_mngt_plan.pdf">http://www.clark.wa.gov/environment/documents/camp_bonneville_mngt_plan.pdf</a>
Climate Action Plan	Some Washington State cities include climate change plans as elements in their comprehensive plans, while some have standalone plans. Such plans are not required in Washington State. <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Environment/Special-Topics/Climate-Change.aspx">http://mrsc.org/Home/Explore-Topics/Environment/Special-Topics/Climate-Change.aspx</a>
Other	If you have any other plans that you feel are relevant for the hazard mitigation plan, please include them here. An example might be a vegetation management plan or a debris management plan. <b>Resource:</b>
<b>Response/Recovery Planning</b>	
Comprehensive Emergency Management Plan	Local jurisdictions are required to develop comprehensive emergency management plans. <b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Emergency-Management-and-Disaster-Planning/Emergency-Planning-at-the-Local-Government-Level.aspx">http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Emergency-Management-and-Disaster-Planning/Emergency-Planning-at-the-Local-Government-Level.aspx</a>
Threat & Hazard Identification & Risk Assessment	Threat and Hazard Identification and Risk Assessment (THIRA) provides a comprehensive approach for identifying and assessing risks and associated impacts. It expands on existing local, tribal, territorial, and state Hazard Identification and Risk Assessments (HIRAs) and other risk methodologies by broadening the factors considered in the process, incorporating the whole community throughout the entire process, and by accounting for important community-specific factors. <b>Resource:</b>
Post-Disaster Recovery Plan	This might also be a resiliency plan. <b>Resource:</b> <a href="http://mil.wa.gov/uploads/pdf/seismic-safety-committee/RWS%20final%20report.pdf">http://mil.wa.gov/uploads/pdf/seismic-safety-committee/RWS%20final%20report.pdf</a>
Continuity of Operations Plan	<b>Resource:</b> <a href="http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Emergency-Management-and-Disaster-Planning/Emergency-Planning-at-the-Local-Government-Level.aspx">http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Emergency-Management-and-Disaster-Planning/Emergency-Planning-at-the-Local-Government-Level.aspx</a>
Public Health Plan	Local plans might address pandemic, mass casualties, etc. <b>Resource:</b>

## Fiscal Capability

Identify what financial resources (other than the Hazard Mitigation Grant Program and the Pre-Disaster Mitigation Grant Program) are available to your jurisdiction for implementing mitigation actions.

Complete the table titled "Fiscal Capability" by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter "Yes" if the resource is fully accessible to your jurisdiction. Enter "No" if there are limitations or prerequisites that may hinder your eligibility for this resource.

Please note that some helpful comments are included in the template document.



## Administrative and Technical Capability

This section requires you to take inventory of the staff/personnel resources available to your jurisdiction to help with hazard mitigation planning and implementation of specific mitigation actions.

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title in the right-hand column.

Please note that if you have contract support staff with these capabilities you can still answer “Yes.” Please just indicate contract support in the department column.

## National Flood Insurance Program Compliance

Identify your jurisdiction’s capabilities in terms of complying with the requirements of the National Flood Insurance Program.

Complete the table titled “National Flood Insurance Program Compliance” by indicating your jurisdiction’s capabilities related to each question in the table.

Please note that some helpful comments are included in the template document.

## Classification in Hazard Mitigation Programs

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in these columns if your jurisdiction is not participating.

Please note that some helpful comments are included in the template document.

## Education and Outreach Capabilities

Complete the table titled “Education and Outreach” to indicate your jurisdiction’s capabilities and existing efforts regarding natural hazard mitigation education and outreach.

## INTEGRATION WITH OTHER PLANNING INITIATIVES

After reviewing the plans, programs and ordinances identified in the above capability assessment tables, please identify those plans and programs where the goals and recommendations of the hazard mitigation plan have already been integrated and those plans and programs that offer opportunities for future integration. It is important to describe the process by which these plans and programs are or will be integrated. Generally speaking, FEMA recommends integration through

- Integrating plan goals with community objectives (e.g. incorporating goals for risk reduction and safety into the policies of other plans)
- Using the risk assessment to inform plans and policies (e.g. incorporation into land use plans and site plan review)
- Implementing mitigation actions through existing mechanisms (e.g. including mitigation projects in the capital improvement plan)

- Thinking about mitigation pre- and post-disaster (e.g. building recovery planning on existing mitigation plans and goals).

## PHASE 3 STARTS HERE

### JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

#### Chronological List of Hazard Events

In the table titled “Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Please refer to the SHELDUS data and Federal Disaster Declarations included in the tool kit, and the summary of natural hazard events within risk assessment of the overall hazard mitigation plan. Potential sources of damage information include:

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Other plans/documents that deal with emergency management (safety element of a comprehensive plan, emergency response plan, etc.)
- Citizen input.

If you do not have estimates for dollars of damage caused, please list “Not Available” in the appropriate column. Please note that tracking such damages, is a valid and useful mitigation action if your jurisdiction does not currently track such information.

### JURISDICTION-SPECIFIC NOTED VULNERABILITIES

#### Repetitive Loss Properties

A repetitive loss property is any property for which FEMA has paid two or more flood insurance claims in excess of \$1,000 in any rolling 10-year period since 1978. In the space provided, Tetra Tech has inserted the following information based on data provided by FEMA:

- The number of any FEMA-identified repetitive-loss properties in your jurisdiction.
- The number of any FEMA-identified severe-repetitive-loss properties in your jurisdiction.
- The number (if any) of repetitive-loss or severe-repetitive-loss properties in your jurisdiction that have been mitigated. Mitigated for this exercise means that flood protection has been provided to the structure.

Please review and verify the information that has been provided in this part of your annex.

#### Other Vulnerabilities

Please list any noted vulnerabilities in your jurisdiction related to hazard mitigation. This may include things such as the following:

- An urban drainage issue that results in localized flooding every time it rains.

- An area of the community that frequently loses power due to a lack of tree maintenance.
- A critical facility, such as a police station, that is not equipped with a generator.
- A neighborhood that has the potential to have ingress and egress cut off as the result of a hazard event, such as a flood or earthquake (e.g. bridge only access).
- Substantial number of buildings in one area of the community are unreinforced masonry.
- An area along the river is eroding and threatening public and/or private property.

## HAZARD RISK RANKING

The risk ranking performed for the overall planning area is presented in the risk assessment section of the overall hazard mitigation plan. However, each jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area, using the same methodology as used for the overall planning area. The risk-ranking exercise assesses two variables for each hazard: its probability of occurrence; and its potential impact on people, property and the economy. The instructions below outline steps for assessing risk in your jurisdiction to develop results that are to be included in the template.

**Please complete this portion of the annex using the Risk Ranking Worksheet and Loss Estimate Matrix provided in the tool kit.**

**Note:** When completing this exercise it is important to remember that this exercise is about categorizing hazards into broad levels of risk (e.g. high, medium, low). It is not an exercise in precision.

### Determine Probability of Occurrence for Each Hazard

A probability factor is assigned based on how often a hazard is likely to occur. The probability of occurrence of a hazard event is generally based on past hazard events in an area, although some weight can be given to expected future probability of occurrence based on established return intervals. For example, if your jurisdiction has experienced two damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your jurisdiction has experienced no damage from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category.

In **Table 1**, list the probability of occurrence for each hazard as it pertains to your jurisdiction. Simply write, “**High**,” “**Medium**,” “**Low**,” or “**None**” in the grey column in Table 1:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- None—If there is no exposure to a hazard, there is no probability of occurrence (Probability Factor = 0)

### Determine Potential Impacts of Each Hazard

The impact of each hazard are divided into three categories: impacts on people, impacts on property, and impacts on the economy. These categories are also assigned weighted values. Impact on people was assigned a weighting factor of 3, impact on property was assigned a weighting factor of 2 and impact on the economy was assigned a weighting factor of 1.

Impact factors for each category (people, property, economy) are described below:

- **People**—Values are assigned based on the percentage of the total *population exposed* to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for

simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. Impact factors were assigned as follows:

- High—25 percent or more of the population is exposed to a hazard (Impact Factor = 3)
  - Medium—10 percent to 24 percent of the population is exposed to a hazard (Impact Factor = 2)
  - Low—9 percent or less of the population is exposed to the hazard (Impact Factor = 1)
  - No impact—None of the population is exposed to a hazard (Impact Factor = 0)
- **Property**—Values are assigned based on the percentage of the total *property value exposed* to the hazard event:
    - High—25 percent or more of the total replacement value is exposed to a hazard (Impact Factor = 3)
    - Medium—10 percent to 24 percent of the total replacement value is exposed to a hazard (Impact Factor = 2)
    - Low—9 percent or less of the total replacement value is exposed to the hazard (Impact Factor = 1)
    - No impact—None of the total replacement value is exposed to a hazard (Impact Factor = 0)
  - **Economy**—Values were assigned based on the percentage of the total *property value vulnerable* to the hazard event. Values represent estimates of the loss from a major event of each hazard in comparison to the total replacement value of the property exposed to the hazard. For some hazards, such as wildfire and landslide, vulnerability may be considered to be the same or a portion of exposure due to the lack of loss estimation tools specific to those hazards.
    - High—Estimated loss from the hazard is 10 percent or more of the total replacement value (Impact Factor = 3)
    - Medium—Estimated loss from the hazard is 5 percent to 9 percent of the total replacement value (Impact Factor = 2)
    - Low—Estimated loss from the hazard is 4 percent or less of the total replacement value (Impact Factor = 1)
    - No impact—No loss is estimated from the hazard (Impact Factor = 0).

The following sections provide information on completing the risk ranking for your jurisdiction.

### **Impacts on People**

The percent of the total population exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **green highlighted column**. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire population is generally considered to be exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all people in the planning area would be exposed to drought, but impacts to the health and safety of individuals are expected to be minimal.

In the grey column in **Table 2**, please list the *percentage of the total population exposed* (e.g. 4.5 or 100). Remember, when you are estimating, the range limits are more important than the actual number (i.e. more than 25, between 25 and 10, and less than 10).

### **Impacts on Property**

The percent of the total value exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **blue highlighted column**. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire building stock is generally considered to be

exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all structures in the planning area would be exposed to drought, but impacts to structures are expected to be minimal.

In the grey column in **Table 4**, please list the *percentage of the total value exposed* (e.g. 4.5 or 100). Remember, when you are estimating, the range limits are more important than the actual number (i.e. more than 25, between 25 and 10, and less than 10).

### **Impacts on the Economy**

The loss estimates for each hazard of concern that was modeled (i.e. dam failure, flood, earthquake) can be found in the loss estimate matrix in the **purple highlighted column**. For those hazards that have a defined extent and location, but do not have modelled loss results, loss estimates can be the same as exposure or a portion thereof. For example, a large percentage of the building stock may be exposed to landslide or wildfire risk, but it would not be expected that one event that resulted in loss to all exposed structures would occur. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire building stock is generally considered to be exposed, but impacts are generally considered to be “low.”

In the grey column in **Table 6**, please list the *percentage of the total value loss* (e.g. 4.5 or 10). Remember, when you are estimating, the range limits are more important than the actual number (i.e. more than 10, between 10 and 5, and less than 5).

### **Determine Risk Rating for Each Hazard**

A risk rating for each hazard is determined by multiplying the assigned probability factor by the sum of the weighted impact factors for people, property and the economy:

$$\text{Risk Rating} = \text{Probability Factor} \times \text{Weighted Impact Factor} \{ \text{people} + \text{property} + \text{economy} \}$$

The risk ranking results will be automatically tabulated for you for each hazard of concern in **Table 7**.

### **Complete Risk Ranking in Template**

Once **Table 7** has been completed above, complete the table titled “Hazard Risk Ranking” in your template. The hazard with the highest risk rating in **Table 7** should be listed at the top of table titled “Hazard Risk Ranking” in your template and given a rank of 1; the hazard with the second highest rating should be listed second with a rank of 2; and so on. Two hazards with equal risk ratings should be given the same rank. After completing this, review the distribution of hazard scores and determine “High,” “Medium,” and “Low” assignments for each hazard of concern. It is important to note, that this should be determined by the range of scores rather than assigning a certain number of hazards to each category.

It is also important to note that this exercise should not override your subjective assessment of relative risk based on your knowledge of the history of natural hazard events in your jurisdiction. If this risk ranking exercise generates results other than what you know based on substantiated data and documentation, you may alter the ranking based on this knowledge. If this is the case, please note this fact in your template (see notations in County-wide risk ranking in Tool Kit). Remember, one of the purposes of this exercise is to support the selection and prioritization of actions in your plan. If you identify an action with a high priority that mitigates the risk of a hazard you have ranked low, that project may not be competitive in the grant arena.

## STATUS OF PREVIOUS PLAN ACTIONS

Provide a status report of actions recommended in your previous hazard mitigation plan. You must be able to reconcile your original action plan to meet FEMA requirements for plan updates. All the recommended actions from your previous plan have been entered in **Table 1-8** in your annex. Put an ✓ in one of the following three columns for each action to indicate its status:

- **Completed**—If the action has been completed, place a check mark in this column and enter a brief explanation in the “Comments” column (e.g., “Action #WC31 was completed by the Public Works Department on 3/12/2009”). Ongoing actions, such as annual outreach projects or maintenance activities, should also be indicated as “Completed,” with a statement about the ongoing nature of the action provided in the “Comments” column (e.g., “Ongoing action, implemented annually by Community Development Department”). Please note that these ongoing actions can have checkmarks in both the completed and carry over columns.
- **Carry Over to Plan Update**—If you did not complete an action and want to carry it over to your updated action plan, place a check mark in this column, and enter an explanatory statement in the comment section (e.g., “Action carried over as Action #WC14 in updated action plan”).
- **Removed; No Longer Feasible**—If you want to remove an action because you have determined that it is no longer feasible, place a check mark in this column. “No longer feasible” means that you have determined that you do not have the capability to implement the action or that the action does not serve the best interest of your jurisdiction. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. Place a comment in the comment section explaining why the action is no longer feasible (e.g., “Action no longer considered feasible due to lack of political support to complete it.”)

Additional information on each identified action item can be found in Chapter 7 of the 2004 plan. There is a table in the document that lists identified actions for each jurisdiction, hazards addressed, timeline, lead agency, etc.

**Note:** Populated previous plan action plan review tables were emailed out to the planning partnership on February 9<sup>th</sup>. If you completed your review of actions, you may copy and paste the table into your annex.

## HAZARD MITIGATION ACTION PLAN

### Action Plan Matrix

Identify the actions your jurisdiction would like to pursue with this plan. Refer to the mitigation catalog for mitigation options you might want to consider. Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify projects where benefits exceed costs.
- Include any project that your jurisdiction has committed to pursuing regardless of grant eligibility.
- Know what is and is not grant-eligible under the HMGP and PDM (see fact sheet provided). Listing HMGP or PDM as a potential funding source for an ineligible project will be a red flag when this plan goes through review. If you have projects that are not HMGP or PDM grant eligible, but do mitigate part or all of the hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section.
- You should identify at least one action for your highest ranked risk, but hazard-specific projects for every hazard are not required. If you have not identified an earthquake related project, and an earthquake occurs that causes damage in your jurisdiction, you are not discounted from HMGP project grant eligibility.

#### Wording Your Action Descriptions:

Descriptions of your actions need not provide great detail. That will come when you apply for a project grant. Provide enough information to identify the project's scope and impact. The following are typical descriptions for an action plan action:

- **Action 1**—Address repetitive-loss properties. Through targeted mitigation, acquire, relocate or retrofit the five repetitive loss structures in the County as funding opportunities become available.
- **Action 2**—Perform a non-structural, seismic retrofit of City Hall.
- **Action 3**—Acquire floodplain property in the Smith subdivision.
- **Action 4**—Enhance the County flood warning capability by joining the NOAA "Storm Ready" program.

### Recommended Actions

We recommend that the following actions be included in every planning partners' annex. The specifics of these actions should be adjusted as needed for the particulars of each community.

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas and prioritize those structures that have experienced repetitive losses.
- Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.
- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan.
- Continue to maintain good standing and compliance under the National Flood Insurance Program (NFIP). This will be accomplished through the implementation of floodplain management programs that will, at a minimum, meet the requirements of the NFIP:
  - Enforcement of the flood damage prevention ordinance
  - Participate in floodplain identification and mapping updates
  - Provide public assistance/information on floodplain requirements and impacts.
- Work with building officials to identify ways to improve the jurisdictions' BCEGS classification.
- Consider the development of a post-disaster recovery plan and a debris management plan.



- Consider participation in programs such as Firewise, StormReady and the Community Rating System.

**Complete the Table**

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified:

- Enter the action number and description .
- Indicate whether the action mitigates hazards for new or existing assets.
- Identify the specific hazards the action will mitigate.
- Identify by number the mitigation plan objectives that the action addresses (see Tool Kit).
- Indicate who will be the lead in administering the project. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department, please ensure that it is clear who the lead agency will be (i.e note with an \*)
- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium” or “Low” as determined for the prioritization process described in the following section.
- Identify funding sources for the project. If it is a grant, include the funding sources for the cost share. Refer to your fiscal capability assessment to identify possible sources of funding.
- Indicate the time line as “short term” (1 to 5 years) or “long term” (5 years or greater) or on-going (a continual program)

**Action Item Numbering:**

- Please use the following action item numbering conventions:
  - Battle Ground: BG-1
  - Camas: CM-1
  - La Center: LC-1
  - Ridgefield: RF-1
  - Vancouver: VC-1
  - Washougal: WS-1
  - Woodland: WD-1
  - Yacolt: YA-1
  - Clark County: CC-1

**Note:** Please don’t forget to carryover actions as appropriate from the review of the previous plan actions. You may reword these actions to indicate next steps or to make them more specific.

Please see the table below for an example for the recommended initiatives above:



## Example Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
<b>EX-1</b> —Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas and prioritize those structures that have experienced repetitive losses.						
Existing	All Hazards	4, 5, 7, 9, 10	Planning	High	HMGP, PDM, FMA, CDBG-DR	Short-term
<b>EX-2</b> —Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.						
New and Existing	All Hazards	2, 4,	Planning	Low	Staff Time, General Funds	On-going
<b>EX-3</b> —Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.						
Existing	All Hazards	1, 2, 4, 12	Emergency Management	Medium	Staff Time, General Funds	Short-term
<b>EX-4</b> —Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.						
New and Existing	All Hazards	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Lead Contact Department for Plan	Low	Staff Time, General Funds	Short-term
<b>EX-5</b> —Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan.						
New and Existing	All Hazards	1, 4	Lead Contact Department for Plan	Low	Staff Time, General Funds	Short-term
<b>EX-6</b> — Continue to maintain good standing and compliance under the National Flood Insurance Program (NFIP). This will be accomplished through the implementation of floodplain management programs that will, at a minimum, meet the requirements of the NFIP:						
<ul style="list-style-type: none"> <li>• Enforcement of the flood damage prevention ordinance</li> <li>• Participate in floodplain identification and mapping updates</li> <li>• Provide public assistance/information on floodplain requirements and impacts.</li> </ul>						
New and Existing	Flood	1, 4, 5, 9	Public Works	Low	Staff Time, General Funds	On-going
<b>EX-7</b> —Work with building officials to identify ways to improve the jurisdictions' BCEGS classification.						
New	Earthquake, Flood, Landslide, Severe weather, Volcano Wildfire	5, 6, 7, 10, 12	Building and Development Services	Low	Staff Time, General Funds	Short-term
<b>EX-8</b> —Develop a post-disaster recovery plan and a debris management plan.						
Existing	All Hazards	1, 2, 4, 9	Emergency Management	Medium	EMPG	Long-term
<b>EX-9</b> —Participate in programs such as Firewise, StormReady and the Community Rating System.						
New and Existing	Dam Failure, Flood, Severe weather, Wildfire	1, 7	Emergency Management* and Public Works	Low	Staff Time, General Funds	Short-term

\*Identified Lead Agency

## Prioritization of Mitigation Actions

Complete the information in the table titled “Mitigation Strategy Priority Schedule” as follows:

- **Action #**—Indicate the action number from the previous annex table (Hazard Mitigation Action Plan Matrix).
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
  - High: Project will have an immediate impact on the reduction of risk exposure to life and property.
  - Medium: Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
  - Low: Long-term benefits of the project are difficult to quantify in the short term.
- **Costs**—Enter “High,” “Medium” or “Low” as follows:
  - High: Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.
  - Medium: Could budget for under existing work-plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
  - Low: Possible to fund under existing budget. Project is or can be part of an existing ongoing program.

If you know the estimated cost of a project because it is part of an existing, ongoing program, indicate the amount.

- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
- **Is the Project Grant-Eligible?**—Enter “Yes” or “No.” Refer to the fact sheet on HMGP and PDM.
- **Can Project Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another source such as grants?
- **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
  - High Priority—An initiative that meets multiple objectives, has benefits that exceed cost, has funding secured or is an ongoing project and meets eligibility requirements for a grant program. High priority initiatives can be completed in the short term (1 to 5 years). The key factors for high priority initiatives are that they have funding secured and can be completed in the short term.
  - Medium Priority—An initiative that meets multiple objectives, that has benefits that exceed costs, and for which funding has not yet been secured, but is eligible for funding. Initiative can be completed in the short term, once funding is secured. Medium priority projects will become high priority projects once funding is secured. The key factors for medium priority initiatives are that they are eligible for funding, but do not yet have funding secured, and they can be completed within the short term.
  - Low Priority—An initiative that will mitigate the risk of a hazard, that has benefits that do not exceed the costs or are difficult to quantify, for which funding has not been secured, that is not eligible for grant funding, and for which the time line for completion is long term (1 to 10 years). Low priority initiatives may be eligible for grant funding from other programs that have not yet been identified. Low priority projects are generally “blue-sky” or “wish-list.” projects. Financing is unknown, and they can be completed over a long term.

- **Grant Funding Priority**— Enter “High,” “Medium” or “Low” as follows:
  - High Priority—An initiative that has been identified as meeting grant eligibility requirements, assessed to have high benefits, is listed as high or medium priority, and where local funding options are unavailable or where dedicated funds could be utilized for projects that are not eligible for grant funding.
  - Medium Priority—An initiative that has been identified as meeting grant eligibility requirements, assessed to have medium or low benefits, is listed as medium or low priority, and where local funding options are unavailable.
  - Low Priority—An initiative that has not been identified as meeting grant eligibility requirements, or has low benefits.

This prioritization is a simple way to determine that your identified actions meet one of the primary objectives of the Disaster Mitigation Act. It is not the detailed benefit/cost analysis required for HMGP/PDM project grants. The prioritization will identify any projects whose probable benefits will not exceed the probable costs. Those initiatives identified as high-priority grant funding initiatives should be closely reviewed for consideration when grant funding opportunities arise.

**Note:** If a jurisdiction wishes to identify a project as high priority that is outside of the prioritization scheme for high priorities. A note indicating so should be inserted and a rationale should be provided.

Please see the example below based off the recommended initiatives:

**Table 1-9. Mitigation Strategy Priority Schedule**

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority <sup>a</sup>	Grant Priority <sup>a</sup>
EX-1	5	High	High	Yes	Yes	No	Medium	High
EX-2	2	Medium	Low	Yes	No	Yes	High	Low
EX-3	4	Low	Medium	No	No	Maybe	Low	Low
EX-4	12	Low	Low	Yes	No	Yes	High	Low
EX-5	2	Low	Low	Yes	No	Yes	High	Low
EX-6	4	Medium	Low	Yes	No	Yes	High	Low
EX-7	5	Medium	Low	Yes	No	Yes	High	Low
EX-8	4	Medium	Medium	Yes	Yes	No	Medium	High
EX-9	2	Medium	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities

### Analysis of Mitigation Actions

Complete the table titled “Analysis of Mitigation Actions” summarizing the mitigation actions by hazard of concern and the following six mitigation types:

- Prevention—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.

- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions.

Please see the example below based off the recommended initiatives, but please note that these recommendations are heavy on the prevention spectrum and light in other areas. Planning partners should aim to identify at least one action in each category:

Analysis of Mitigation Actions						
Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	EX-2, EX-3, EX-4, EX-5, EX-6, EX-8	EX-1, EX-6	EX-4, EX-6		EX-8	
Drought	EX-2, EX-3, EX-4, EX-5, EX-8	EX-1	EX-4,		EX-8	
Earthquake	EX-2, EX-3, EX-4, EX-5, EX-7, EX-8	EX-1, EX-7	EX-4		EX-8	
Flood	EX-2, EX-3, EX-4, EX-5, EX-6, EX-7, EX-8	EX-1, EX-6, EX-7	EX-4, EX-6	EX-9	EX-8	
Landslide	EX-2, EX-3, EX-4, EX-5, EX-7, EX-8	EX-1, EX-7	EX-4		EX-8	
Severe weather	EX-2, EX-3, EX-4, EX-5, EX-7, EX-8	EX-1, EX-7, EX-9	EX-4		EX-8, EX-9	
Volcano	EX-2, EX-3, EX-4, EX-5, EX-7, EX-8	EX-1, EX-7	EX-4		EX-8	

Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Wildfire	EX-2, EX-3, EX-4, EX-5, EX-7	EX-1, EX-7, EX-9	EX-4, EX-9	EX-9		

### FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. Please note that this section is optional.

### ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. Please note that this section is optional.



# 1. MUNICIPAL JURISDICTION NAME

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## 1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

### Primary Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

### Alternate Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

## 1.2 JURISDICTION PROFILE

The following is a summary of key information about the jurisdiction and its history:

- Date of Incorporation—
- Current Population—
- Population Growth—
- Location and Description—
- Brief History—
- Climate—
- Governing Body Format—
- Development Trends—

## 1.3 CAPABILITY ASSESSMENT

An assessment of legal and regulatory capabilities is presented in Table 1-1. An assessment of fiscal capabilities is presented in Table 1-2. An assessment of administrative and technical capabilities is presented in Table 1-3. Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-4. Classifications under various community mitigation programs are presented in Table 1-5.

**Table 1-1. Legal and Regulatory Capability**

	Local Authority	State or Federal Prohibitions	Other Jurisdiction Authority	State Mandated
<b>Codes, Ordinances &amp; Requirements</b>				
Building Code				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Zoning Code				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Subdivisions				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Stormwater Management				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Post-Disaster Recovery				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Real Estate Disclosure				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Growth Management				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Site Plan Review				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Public Health and Safety				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Environmental Protection				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
<b>Planning Documents</b>				
General or Comprehensive Plan				
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>	Yes/No			
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Capital Improvement Plan				
<i>What types of capital facilities does the plan address?</i>	List facility types			
<i>How often is the plan updated?</i>	Indicate update frequency			
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Floodplain or Basin Plan				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Stormwater Plan				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Habitat Conservation Plan				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Economic Development Plan				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Shoreline Management Plan				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			
Community Wildfire Protection Plan				
<i>Comment:</i>	Insert Code Number and Adoption Date; Other Comments			



	Local Authority	State or Federal Prohibitions	Other Jurisdiction Authority	State Mandated
<b>Response/Recovery Planning</b>				
Comprehensive Emergency Management Plan				
<i>Comment: Insert Code Number and Adoption Date; Other Comments</i>				
Threat & Hazard Identification & Risk Assessment				
<i>Comment: Insert Code Number and Adoption Date; Other Comments</i>				
Terrorism Plan				
<i>Comment: Insert Code Number and Adoption Date; Other Comments</i>				
Post-Disaster Recovery Plan				
<i>Comment: Insert Code Number and Adoption Date; Other Comments</i>				
Continuity of Operations Plan				
<i>Comment: Insert Code Number and Adoption Date; Other Comments</i>				
Public Health Plan				
<i>Comment: Insert Code Number and Adoption Date; Other Comments</i>				

**Table 1-2. Fiscal Capability**

Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes/No
Capital Improvements Project Funding	Yes/No
Authority to Levy Taxes for Specific Purposes	Yes/No
User Fees for Water, Sewer, Gas or Electric Service	Yes/No
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
Withhold Public Expenditures in Hazard-Prone Areas	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Other	Yes/No

**Table 1-3. Administrative and Technical Capability**

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes/No	Insert appropriate information
Engineers or professionals trained in building or infrastructure construction practices	Yes/No	Insert appropriate information
Planners or engineers with an understanding of natural hazards	Yes/No	Insert appropriate information
Staff with training in benefit/cost analysis	Yes/No	Insert appropriate information
Surveyors	Yes/No	Insert appropriate information
Personnel skilled or trained in GIS applications	Yes/No	Insert appropriate information
Scientist familiar with natural hazards in local area	Yes/No	Insert appropriate information
Emergency manager	Yes/No	Insert appropriate information
Grant writers	Yes/No	Insert appropriate information

**Table 1-4. National Flood Insurance Program Compliance**

Criteria	Response
What local department is responsible for floodplain management?	Insert appropriate information
Who is your floodplain administrator? (department/position)	Insert appropriate information
Are any certified floodplain managers on staff in your jurisdiction?	Yes/No
What is the date of adoption of your flood damage prevention ordinance?	Insert appropriate information
When was the most recent Community Assistance Visit or Community Assistance Contact?	Insert appropriate information
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> <li>If so, please state what they are.</li> </ul>	Yes/No Insert appropriate information
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> <li>If no, please state why.</li> </ul>	Yes/No Insert appropriate information
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> <li>If so, what type of assistance/training is needed?</li> </ul>	Yes/No Insert appropriate information
Does your jurisdiction participate in the Community Rating System (CRS)? <ul style="list-style-type: none"> <li>If so, is your jurisdiction seeking to improve its CRS Classification?</li> <li>If not, is your jurisdiction interested in joining the CRS program?</li> </ul>	Yes/No Yes/No Yes/No

**Table 1-5. Community Classifications**

	Participating?	Classification	Date Classified
Community Rating System	Yes/No		Date
Building Code Effectiveness Grading Schedule	Yes/No		Date
Public Protection	Yes/No		Date
Storm Ready	Yes/No		Date
Firewise	Yes/No		Date

## 1.4 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 1-6 lists all past occurrences of natural hazards within the jurisdiction.

Table 1-6. Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
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Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$

### 1.5 JURISDICTION-SPECIFIC VULNERABILITIES

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: XX
- Number of FEMA-identified Severe-Repetitive-Loss Properties: XX
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: XX

Other noted vulnerabilities include:

- Insert as appropriate.

### 1.6 HAZARD RISK RANKING

Table 1-7 presents the ranking of the hazards of concern.

Table 1-7. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Insert hazard type		High/Medium/Low
2	Insert hazard type		High/Medium/Low
3	Insert hazard type		High/Medium/Low
4	Insert hazard type		High/Medium/Low
5	Insert hazard type		High/Medium/Low
6	Insert hazard type		High/Medium/Low
7	Insert hazard type		High/Medium/Low
8	Insert hazard type		High/Medium/Low
9	Insert hazard type		High/Medium/Low

## 1.7 STATUS OF PREVIOUS PLAN INITIATIVES

Table 1-8 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

**Table 1-8** Hazard Mitigation Action Plan Matrix

Action Item	Completed	Carry Over to Plan Update	Removed; No Longer Feasible
<b>Action #—Description</b>			
<i>Comment:</i>			
Join the CRS program			
<i>Comment:</i>			
<b>Action #—Description</b>			
<i>Comment:</i>			
<b>Action #—Description</b>			
<i>Comment:</i>			
<b>Action #—Description</b>			
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<b>Action #—Description</b>			
<i>Comment:</i>			

Action Item	Completed	Carry Over to Plan Update	Removed; No Longer Feasible
Action #—Description			
<i>Comment:</i>			
Action #—Description			
<i>Comment:</i>			

## 1.8 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 1-9 lists the actions that make up the Municipal Jurisdiction Name hazard mitigation action plan. Table 1-10 identifies the priority for each action. Table 1-11 summarizes the mitigation actions by hazard of concern and the six mitigation types.

**Table 1-9. Hazard Mitigation Action Plan Matrix**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						
Action #—Description						

**Table 1-10. Mitigation Strategy Priority Schedule**

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority <sup>a</sup>	Grant Priority <sup>a</sup>

a. See the introduction to this volume for explanation of priorities.

**Table 1-11. Analysis of Mitigation Actions**

Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects

a. See the introduction to this volume for explanation of mitigation types.

### 1.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

### 1.10 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section





# 1. INSTRUCTIONS FOR COMPLETING SPECIAL-PURPOSE DISTRICT ANNEX TEMPLATE

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The jurisdictional annex templates for the 2016 Clark County Hazard Mitigation Plan will be completed in three phases. **This document provides instructions for completing all phases of the template for municipalities.**

**If your jurisdiction completed and submitted Phase 1 and Phase 2,** Phase 3 has been added to the end of your annex to date. Any planning team comments, questions or suggestions have been included as blue highlighted notes and/or comments. Any text edits were made via track changes. Any yellow highlights indicate areas where missing information should be filled in. Phase 3 instructions begin on page 6.

**If your jurisdiction did not complete Phase 1 or Phase 2,** please complete all phases at this time.

**Completed, draft templates should be completed by Friday, April 15, 2016. If you will not be able to meet this deadline, you must let the planning team know by April 8, 2016.**

**Any questions on completing the template should be directed to:**

Kristen Gelino  
Tetra Tech, Inc.  
(646) 576-4029  
e-mail: Kristen.gelino@tetrattech.com

Assistance in completing Phase 3 and any uncompleted portions of Phase 1 and Phase 2 of the template will be provided at the workshop for all planning partners to be scheduled in March.

## Special Purpose District Annex:

This document provides instructions for completing **Phase 3** of the jurisdictional annex template for special purpose districts. **Phase 3 templates should be completed by Friday, April 15, 2016. If you will not be able to meet this deadline, you must let the planning team know by April 8, 2016.**

### *Associated Document:*

Phase3\_DISTRICTNAME.dotm  
ClarkCo\_2016HMP\_ToolKit

## A Note About Formatting:

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner. Partners who do not have Microsoft Word capability may prepare the document in other formats, and the planning team will convert it to the Word format.

Content should be entered within the yellow, highlighted text that is currently in the template, rather than creating text in another document and pasting it into the template. Text from another source will alter the style and formatting of the document.

The numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of this numbering.

## PHASE 1 STARTS HERE

### CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your district (e.g. West County Fire Protection District #1, Johnsonville Flood Protection District, etc.). Please do not change the chapter number. Revise only the jurisdiction name.

### HAZARD MITIGATION PLAN POINT OF CONTACT

Please provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

*Note: Both of these contacts should match the contacts that were designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, please let the planning team know by inserting a comment into the document.*

### JURISDICTION PROFILE

#### Overview

Please provide a brief summary description of your jurisdiction. Please be sure to include:

- the purpose of the jurisdiction,
- the date of inception,
- the type of organization,
- the number of employees,
- the mode of operation (i.e., how operations are funded),
- the type of governing body, and who has adoptive authority,
- a description of who the jurisdiction's customers are (if applicable, include number of users or subscribers), and
- a geographical description of the service area.

#### Example Jurisdiction Narrative Profile:

The Johnsonville Community Services District is a special-purpose district created in 1952 to provide water and sewer service to the unincorporated area east of the City of Smithburg known as Johnsonville. The District's designated service area expanded throughout the years to include other unincorporated areas of Jones County: Creeks Corner, Jones Hill, Fields Landing, King Salmon, and Freshwater. A five-member elected Board of Directors governs the District. The Board assumes responsibility for the adoption of this plan; the General Manager will oversee its implementation. As of April 30, 2014, the District serves 7,305 water connections and 6,108 sewer connections, with a current staff of 21. Funding comes primarily through rates and revenue bonds.

Provide information similar to the example provided in the box above. This should be information that is specific to your jurisdiction and will not be provided in the overall, county-wide mitigation plan document.

## Service Area and Trends

In the first paragraph, insert the following:

- **Population Served**—List the population that your jurisdiction provides services to. If you do not know this number directly, create an estimate (e.g., the number of service connections times the average service area household size based on Census data).
- **Land Area Served**—Enter the service area of your jurisdiction in acres or square miles.
- **Value of Area Served**—Enter the approximate replacement value of structures in your service area based on the information provided in the table below. These numbers have been generated by overlaying your jurisdiction’s service area boundary on the general building stock information acquired and updated for the risk assessment portion of this plan. If you believe we have used an incorrect service area boundary for your jurisdiction, please let the planning team know and we will update the estimate.

### Boundary Map:

Maps that illustrate the service area boundary for all special-purpose district partners have been provided with this document. At this time we ask that you please confirm that the boundaries reflected on the maps are current and accurate for your jurisdiction. If you have a GIS-based boundary file that you would prefer we use, please let the planning team know.

Special Purpose District	Boundary Source	Estimated Replacement Value for Service Area (structure value)
Battle Ground Public Schools	Clark GIS schdst file	\$8.9 billion
Camas School District	Clark GIS schdst file	\$5.2 billion
Clark Public Utilities		
Electrical service	Clark County boundary	\$64.2 billion
Water service	Unincorporated areas and Yacolt	\$26.7 billion
Clark Regional Wastewater District	UGA boundary from CRWWD (updated 12/7 version)	\$14.5 billion
C-TRAN	Vancouver Urban Growth Area, city limits of Camas, Washougal, Ridgefield, La Center, Battle Ground, and Yacolt	\$55.3 billion
Fire District 3	Clark GIS firedst file and Battle Ground city limits	\$5.9 billion
Green Mountain School District No. 103	Clark GIS schdst file	\$131.4 million
Port of Vancouver	Clark GIS portdst file	\$43.6 billion
Ridgefield School District	Clark GIS schdst file	\$2.7 billion

Enter a brief description of how your jurisdiction’s services are projected to expand in the foreseeable future and why. Note any identified capital improvements needed to meet the projected expansion. Examples are as follows:

- **For a Fire District**—Portions of the jurisdiction have experienced a 13-percent growth over the last five years. Land use designations allow for an increase in light commercial and residential land uses within the service area. This increase in density will represent an increase in population and thus a projected increase in call volume. Our District is experiencing an average annual increase in call volume of 13 percent.
- **For Dike/Drainage/Flood Control District**—Portions of the jurisdiction have experienced a 13 percent growth over the last five years. Land use designations allow for an increase in light commercial and residential land uses within the service area. This increase in density of land use will result in an increase in impermeable surface within our service area and thus increase the demand on control facilities.
- **For a Water District**—Portions of the jurisdiction have experienced a 13 percent growth over the last five years. Land use designations allow for an increase in light commercial and residential land uses

within the service area. This increase in density of land use will represent an increase in the number of housing units within the service area and thus represent an expansion of the district’s delivery network.

## Assets

Complete the table titled “Special Purpose District Assets” as follows (Please note: estimates on replacement value are perfectly acceptable):

- **Property**—Enter the area of property owned by the jurisdiction in acres or square miles and the assessed value of that property.
- **List of Critical Infrastructure and Equipment**—List all infrastructure and equipment owned by your jurisdiction that is critical to the jurisdiction’s operations. Briefly describe the item and give its estimated replacement-cost value. Examples are as follows:
  - Fire Districts— This is the equipment that is essential for you to deliver services to this area should a natural hazard occur. It is not necessary to provide a detailed inventory of each engine and truck and its contents. A summary will suffice, such as “5 Engines, 2 ladders, and their contents.” Do not list reserve equipment.
  - Dike/Flood Control Districts—Miles of levees, pump stations, retention/detention ponds, tide gates, miles of ditches, etc., within natural hazard risk zones.
  - Water Districts—Total length of pipe (it is not necessary to specify size and type), pump stations, treatment facilities, dams and reservoirs, within natural hazard risk zones.
  - Public Utility Districts—Miles of power line (above ground and underground), generators, power generating sub-stations, miles of pipeline, etc.
  - School Districts—Anything, besides school buildings, that is critical for you to operate (e.g., school buses if you own a fleet of school buses).
- **Total Value of Critical Infrastructure/Equipment**—Enter total replacement-cost value of the critical infrastructure and equipment listed above.
- **List of Critical Facilities Owned by the Jurisdiction**—List all buildings and other facilities that are critical to your jurisdiction’s operations. Briefly describe the facility and give its estimated replacement-cost value.
- **Total Value of Critical Facilities**— Enter total replacement-cost value of the critical facilities listed above.

### Critical Facilities:

As part of the planning process, the planning team will be developing a critical facilities database to assess risk to critical facilities from natural hazards. If your jurisdiction has a GIS-based file of your jurisdiction’s critical facilities and/or infrastructure, please let the planning team know. Please note that the results of this assessment will be made available to the planning partnership, but will not be published in full in the plan document. The results will be summarized by facility type.

This asset inventory will be used to assess relative risk from each hazard of concern during the risk ranking exercise that will occur during phase 3 of the jurisdictional annex template development. You will be provided with supplemental information (i.e. HAZUS results and facility exposure information) that you will use to determine the percentage of the total value of your assets exposed to each hazard of concern.

## PHASE 2 STARTS HERE

### PLANNING AND REGULATORY CAPABILITIES

List any federal, state, local or district laws, ordinances, codes and policies that govern your jurisdiction that include elements related to hazard mitigation. Describe how these laws may support or conflict with the mitigation strategies of this plan. List any other plans, studies or other documents that address hazard mitigation issues for your jurisdiction. “None applicable” is a possible answer for this section.

### FISCAL, ADMINISTRATIVE AND TECHNICAL CAPABILITIES

If your jurisdiction is a Fire District and participates in the Public Protection Class Rating System, please complete the first sentence in this section. If your jurisdiction is not a fire district, please delete the yellow highlighted sentence.

#### Fiscal Capability

Complete the table titled “Fiscal Capability” to identify what financial resources (other than the Hazard Mitigation Grant Program and the Pre-Disaster Mitigation Grant Program) are available to your jurisdiction for implementing mitigation actions. Indicate whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your eligibility for this resource.

Please note that some helpful comments are included in the template document.

#### Administrative and Technical Capability

This section requires you to take inventory of the staff/personnel resources available to your jurisdiction to help with hazard mitigation planning and implementation of specific mitigation actions.

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title in the right-hand column.

Please note that if you have contract support staff with these capabilities you can still answer “Yes.” Please just indicate contract support in the department column.

### EDUCATION AND OUTREACH CAPABILITIES

Complete the table titled “Education and Outreach” to indicate your jurisdiction’s capabilities and existing efforts regarding natural hazard mitigation education and outreach.

### INTEGRATION WITH OTHER PLANNING INITIATIVES

After reviewing the plans, programs and ordinances identified in the above capability assessment, please identify those plans and programs where the goals and recommendations of the hazard mitigation plan have already been integrated and those plans and programs that offer opportunities for future integration. It is important to describe the process by which these plans and programs are or will be integrated. Generally speaking, FEMA recommends integration through

- Integrating plan goals with community objectives (e.g. incorporating goals for risk reduction and safety into the policies of other plans)
- Using the risk assessment to inform plans and policies (e.g. incorporation into strategic plans)
- Implementing mitigation actions through existing mechanisms (e.g. including mitigation projects in the capital improvement plan)
- Thinking about mitigation pre- and post-disaster (e.g. building recovery planning on existing mitigation plans and goals).

## PHASE 3 STARTS HERE

### JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

#### Chronological List of Hazard Events

In the table titled “Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Please refer to the SHELDUS data and Federal Disaster Declarations included in the tool kit, and the summary of natural hazard events within risk assessment of the overall hazard mitigation plan. Potential sources of damage information include:

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Other plans/documents that deal with emergency management (safety element of a comprehensive plan, emergency response plan, etc.)
- Citizen input.

If you do not have estimates for dollars of damage caused, please list “Not Available” in the appropriate column. You may also provide a brief description of damages if desired. Please note that tracking such damages, is a valid and useful mitigation action if your jurisdiction does not currently track such information.

### JURISDICTION-SPECIFIC NOTED VULNERABILITIES

#### Other Vulnerabilities

Please list any noted vulnerabilities in your jurisdiction related to hazard mitigation. This may include things such as the following:

- An urban drainage issue that results in localized flooding every time it rains.
- An area of the community that frequently loses power due to a lack of tree maintenance.
- A critical facility, such as a police station, that is not equipped with a generator.
- A neighborhood that has the potential to have ingress and egress cut off as the result of a hazard event, such as a flood or earthquake (e.g. bridge only access).
- Substantial number of buildings in one area of the community are unreinforced masonry.
- An area along the river is eroding and threatening public and/or private property.



## HAZARD RISK RANKING

The risk ranking performed for the overall planning area is presented in the risk assessment section of the overall hazard mitigation plan. However, each jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area, using an adapted methodology from that which was used for the overall planning area. The risk-ranking exercise assesses two variables for each hazard: its probability of occurrence; and its potential impact on people, property and the economy/operations. The instructions below outline steps for assessing risk in your jurisdiction to develop results that are to be included in the template.

**Please complete this portion of the annex using the Risk Ranking Worksheet and Loss Estimate Matrix information provided in the tool kit.**

**Note:** When completing this exercise it is important to remember that this exercise is about categorizing hazards into broad levels of risk (e.g. high, medium, low). It is not an exercise in precision.

### Determine Probability of Occurrence for Each Hazard

A probability factor is assigned based on how often a hazard is likely to occur. The probability of occurrence of a hazard event is generally based on past hazard events in an area, although some weight can be given to expected future probability of occurrence based on established return intervals. For example, if your jurisdiction has experienced two damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your jurisdiction has experienced no damage from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category.

In **Table 1**, list the probability of occurrence for each hazard as it pertains to your jurisdiction. Simply write, “**High**,” “**Medium**,” “**Low**,” or “**None**” in the grey column in Table 1:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- None—If there is no exposure to a hazard, there is no probability of occurrence (Probability Factor = 0)

### Determine Potential Impacts of Each Hazard

The impact of each hazard was divided into three categories: impacts on people, impacts on property, and impacts on the economy/operations. These categories were also assigned weighted values. Impact on people was assigned a weighting factor of 3, impact on property was assigned a weighting factor of 2 and impact on the economy/operations was assigned a weighting factor of 1.

Impact factors for each category (people, property, economy) are described below:

- **People**—Values are assigned based on the percentage of the total *population exposed* to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. Impact factors were assigned as follows:
  - High—25 percent or more of the population is exposed to a hazard (Impact Factor = 3)
  - Medium—10 percent to 24 percent of the population is exposed to a hazard (Impact Factor = 2)
  - Low—9 percent or less of the population is exposed to the hazard (Impact Factor = 1)
  - No impact—None of the population is exposed to a hazard (Impact Factor = 0)

- **Property**—Values are assigned based on the percentage of the total *property value exposed* to the hazard event:
  - High—25 percent or more of the total replacement value is exposed to a hazard (Impact Factor = 3)
  - Medium—10 percent to 24 percent of the total replacement value is exposed to a hazard (Impact Factor = 2)
  - Low—9 percent or less of the total replacement value is exposed to the hazard (Impact Factor = 1)
  - No impact—None of the total replacement value is exposed to a hazard (Impact Factor = 0)
- **Economy or Operations**—Impact on operations is assessed based on estimates of *how long it will take your jurisdiction to become 100-percent operable* after a hazard event.
  - High = functional downtime of 365 days or more (Impact Factor = 3)
  - Medium = Functional downtime of 180 to 364 days (Impact Factor = 2)
  - Low = Functional downtime of 180 days or less (Impact Factor = 1)
  - No Impact = No functional downtime is estimated from the hazard (Impact Factor = 0)

The following sections provide information on completing the risk ranking for your jurisdiction.

### **Impacts on People**

The percent of the total population exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **green highlighted column**. It may be necessary for you to make estimates based on looking at the hazard maps and the populations that you serve. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire population is generally considered to be exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all people in the planning area would be exposed to drought, but impacts to the health and safety of individuals are expected to be minimal.

In the grey column in **Table 2**, please list the *percentage of the total population exposed* (e.g. 4.5 or 100). Remember, when you are estimating, the range limits are more important than the actual number (i.e. more than 25, between 25 and 10, and less than 10).

### **Impacts on Property**

Estimate the impacts on property for your jurisdiction by reviewing the critical facility exposure estimates provided in the loss estimate information. Estimate the percentage of your total assets that are exposed to each hazard of concern (note: review your assets table in phase 1 of your annex). You may also wish to review the maps. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all structures in the planning area would be exposed to drought, but impacts to structures are expected to be minimal.

In the grey column in **Table 4**, please list the *percentage of the total value exposed* (e.g. 4.5 or 100). Remember, when you are estimating, the range limits are more important than the actual number (i.e. more than 25, between 25 and 10, and less than 10).

### **Impacts on the Economy/Operations**

The loss estimates for each critical facility that was impacted for each hazard of concern that was modeled (i.e. dam failure, flood, earthquake) can be found in the critical facility vulnerability results in the **yellow highlighted column (note: this information is still being compiled and is forthcoming)**. For those hazards that do not have modelled results, use your subjective judgement and institutional knowledge.



In the grey column in **Table 6**, please list the *functional downtime in days* (e.g. 1 or 300). Remember, when you are estimating, the range limits are more important than the actual number (i.e. more than 365, between 354 and 180, and less than 180).

## Determine Risk Rating for Each Hazard

A risk rating for each hazard is determined by multiplying the assigned probability factor by the sum of the weighted impact factors for people, property and the economy:

$$\text{Risk Rating} = \text{Probability Factor} \times \text{Weighted Impact Factor} \{ \text{people} + \text{property} + \text{economy/operations} \}$$

The risk ranking results will be automatically tabulated for you for each hazard of concern in **Table 7**.

## Complete Risk Ranking in Template

Once **Table 7** has been completed above, complete the table titled “Hazard Risk Ranking” in your template. The hazard with the highest risk rating in **Table 7** should be listed at the top of table titled “Hazard Risk Ranking” in your template and given a rank of 1; the hazard with the second highest rating should be listed second with a rank of 2; and so on. Two hazards with equal risk ratings should be given the same rank. After completing this, review the distribution of hazard scores and determine “High,” “Medium,” and “Low” assignments for each hazard of concern. It is important to note, that this should be determined by the range of scores rather than assigning a certain number of hazards to each category.

It is also important to note that this exercise should not override your subjective assessment of relative risk based on your knowledge of the history of natural hazard events in your jurisdiction. If this risk ranking exercise generates results other than what you know based on substantiated data and documentation, you may alter the ranking based on this knowledge. If this is the case, please note this fact in your template (see notations in County-wide risk ranking in Tool Kit). Remember, one of the purposes of this exercise is to support the selection and prioritization of actions in your plan. If you identify an action with a high priority that mitigates the risk of a hazard you have ranked low, that project may not be competitive in the grant arena.

## HAZARD MITIGATION ACTION PLAN

### Action Plan Matrix

Identify the actions your jurisdiction would like to pursue with this plan. Refer to the mitigation catalog for mitigation options you might want to consider. Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify projects where benefits exceed costs.
- Include any project that your jurisdiction has committed to pursuing regardless of grant eligibility.
- Know what is and is not grant-eligible under the HMGP and PDM (see fact sheet provided). Listing HMGP or PDM as a potential funding source for an ineligible project will be a red flag when this plan goes through review. If you have projects that are not HMGP or PDM grant eligible, but do mitigate part

#### Wording Your Action Descriptions:

Descriptions of your actions need not provide great detail. That will come when you apply for a project grant. Provide enough information to identify the project’s scope and impact. The following are typical descriptions for an action plan action:

- **Action 1**—Address repetitive-loss properties. Through targeted mitigation relocate or retrofit the nine pump stations that have been repetitively damaged.
- **Action 2**—Perform a non-structural, seismic retrofit of the administrative building.
- **Action 3**—Develop a schedule to underground overhead powerlines.

or all of the hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section.

- You should identify at least one action for your highest ranked risk, but hazard-specific projects for every hazard are not required. If you have not identified an earthquake related project, and an earthquake occurs that causes damage in your jurisdiction, you are not discounted from HMGP project grant eligibility.

### **Recommended Actions**

We recommend that the following actions be included in every planning partners' annex. The specifics of these actions should be adjusted as needed for the particulars of each community.

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas and prioritize those structures that have experienced repetitive losses.
- Integrate the hazard mitigation plan into other plans and programs that support infrastructure investments choices, such as the capital improvement program.
- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan.
- Consider the development of a post-disaster recovery plan and a debris management plan.

### **Complete the Table**

Complete the table titled "Hazard Mitigation Action Plan Matrix" for all the actions you have identified:

- Enter the action number and description .
- Indicate whether the action mitigates hazards for new or existing assets.
- Identify the specific hazards the action will mitigate.
- Identify by number the mitigation plan objectives that the action addresses (see Tool Kit).
- Indicate who will be the lead in administering the project. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department, please ensure that it is clear who the lead agency will be (i.e note with an \*)
- Enter an estimated cost in dollars if known; otherwise, enter "High," "Medium" or "Low" as determined for the prioritization process described in the following section.
- Identify funding sources for the project. If it is a grant, include the funding sources for the cost share. Refer to your fiscal capability assessment to identify possible sources of funding.
- Indicate the time line as "short term" (1 to 5 years) or "long term" (5 years or greater) or on-going (a continual program)

#### **Action Item Numbering:**

- Please use the following action item numbering conventions:
  - Battle Ground Public Schools: BGPS-1
  - Clark Public Utilities: CPU-1
  - Clark Regional Wastewater District-CRWWD-1
  - C-TRAN: CTRAN-1
  - Fire District 3: FD3-1
  - Green Mountain School District No. 103: GMSD-1
  - Port of Vancouver: POV-1
  - Ridgefield School District: RSD-1

Please see the table below for an example for the recommended initiatives above:

Example Action Plan Matrix						
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
<b>EX-1</b> —Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas and prioritize those structures that have experienced repetitive losses.						
Existing	All Hazards	4, 5, 7, 9, 10	Maintenance	High	HMGP, PDM, FMA, CDBG-DR	Short-term
<b>EX-2</b> — Integrate the hazard mitigation plan into other plans and programs that support infrastructure investments choices, such as the capital improvement program.						
New and Existing	All Hazards	2, 4,	Board	Low	Staff Time, General Funds	On-going
<b>EX-3</b> —Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.						
Existing	All Hazards	1, 2, 4, 12	Emergency Management	Medium	Staff Time, General Funds	Short-term
<b>EX-4</b> —Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.						
New and Existing	All Hazards	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Lead Contact Department for Plan	Low	Staff Time, General Funds	Short-term
<b>EX-5</b> —Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan.						
New and Existing	All Hazards	1, 4	Lead Contact Department for Plan	Low	Staff Time, General Funds	Short-term
<b>EX-6</b> —Develop a post-disaster recovery plan and a debris management plan.						
Existing	All Hazards	1, 2, 4, 9	Emergency Management	Medium	EMPG	Long-term

\*Identified Lead Agency

## Prioritization of Mitigation Actions

Complete the information in the table titled “Mitigation Strategy Priority Schedule” as follows:

- **Action #**—Indicate the action number from the previous annex table (Hazard Mitigation Action Plan Matrix).
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
  - High: Project will have an immediate impact on the reduction of risk exposure to life and property.
  - Medium: Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
  - Low: Long-term benefits of the project are difficult to quantify in the short term.
- **Costs**—Enter “High,” “Medium” or “Low” as follows:
  - High: Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

- Medium: Could budget for under existing work-plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
- Low: Possible to fund under existing budget. Project is or can be part of an existing ongoing program.

If you know the estimated cost of a project because it is part of an existing, ongoing program, indicate the amount.

- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
- **Is the Project Grant-Eligible?**—Enter “Yes” or “No.” Refer to the fact sheet on HMGP and PDM.
- **Can Project Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another source such as grants?
- **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
  - High Priority—An initiative that meets multiple objectives, has benefits that exceed cost, has funding secured or is an ongoing project and meets eligibility requirements for a grant program. High priority initiatives can be completed in the short term (1 to 5 years). The key factors for high priority initiatives are that they have funding secured and can be completed in the short term.
  - Medium Priority—An initiative that meets multiple objectives, that has benefits that exceed costs, and for which funding has not yet been secured, but is eligible for funding. Initiative can be completed in the short term, once funding is secured. Medium priority projects will become high priority projects once funding is secured. The key factors for medium priority initiatives are that they are eligible for funding, but do not yet have funding secured, and they can be completed within the short term.
  - Low Priority—An initiative that will mitigate the risk of a hazard, that has benefits that do not exceed the costs or are difficult to quantify, for which funding has not been secured, that is not eligible for grant funding, and for which the time line for completion is long term (1 to 10 years). Low priority initiatives may be eligible for grant funding from other programs that have not yet been identified. Low priority projects are generally “blue-sky” or “wish-list.” projects. Financing is unknown, and they can be completed over a long term.
- **Grant Funding Priority**— Enter “High,” “Medium” or “Low” as follows:
  - High Priority—An initiative that has been identified as meeting grant eligibility requirements, assessed to have high benefits, is listed as high or medium priority, and where local funding options are unavailable or where dedicated funds could be utilized for projects that are not eligible for grant funding.
  - Medium Priority—An initiative that has been identified as meeting grant eligibility requirements, assessed to have medium or low benefits, is listed as medium or low priority, and where local funding options are unavailable.
  - Low Priority—An initiative that has not been identified as meeting grant eligibility requirements, or has low benefits.

This prioritization is a simple way to determine that your identified actions meet one of the primary objectives of the Disaster Mitigation Act. It is not the detailed benefit/cost analysis required for HMGP/PDM project grants. The prioritization will identify any projects whose probable benefits will not exceed the probable costs. Those initiatives identified as high-priority grant funding initiatives should be closely reviewed for consideration when grant funding opportunities arise.

**Note:** If a jurisdiction wishes to identify a project as high priority that is outside of the prioritization scheme for high priorities. A note indicating so should be inserted and a rationale should be provided.

Please see the example below based off the recommended initiatives:

**Table 1-9. Mitigation Strategy Priority Schedule**

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority <sup>a</sup>	Grant Priority <sup>a</sup>
EX-1	5	High	High	Yes	Yes	No	Medium	High
EX-2	2	Medium	Low	Yes	No	Yes	High	Low
EX-3	4	Low	Medium	No	No	Maybe	Low	Low
EX-4	12	Low	Low	Yes	No	Yes	High	Low
EX-5	2	Low	Low	Yes	No	Yes	High	Low
EX-6	4	Medium	Medium	Yes	Yes	No	Medium	High

a. See the introduction to this volume for explanation of priorities

### Analysis of Mitigation Actions

Complete the table titled “Analysis of Mitigation Actions” summarizing the mitigation actions by hazard of concern and the following six mitigation types:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions.

Please see the example below based off the recommended initiatives, but please note that these recommendations are heavy on the prevention spectrum and light in other areas. Planning partners should aim to identify at least one action in each category:

Analysis of Mitigation Actions						
Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	
Drought	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4,		EX-6	
Earthquake	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	
Flood	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	
Landslide	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	
Severe weather	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	
Volcano	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	
Wildfire	EX-2, EX-3, EX-4, EX-5, EX-6	EX-1	EX-4		EX-6	

### FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. Please note that this section is optional.

### ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. Please note that this section is optional.

# 1. SPECIAL PURPOSE DISTRICT NAME

---

## 1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

### Primary Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

### Alternate Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

## 1.2 JURISDICTION PROFILE

### 1.2.1 Overview

Insert Narrative Profile Information, per Instructions

### 1.2.2 Service Area and Trends

The district serves a population of population. Its service area covers an area of area, which has a total value of \$ value.

Insert summary description of service trends.

### 1.2.3 Assets

Table 1-1 summarizes the critical assets of the district and their value.

**Table 1-1. Special Purpose District Assets**

Asset	Value
<b>Property</b>	
<u>number</u> acres of land	\$ <u>value</u>
<b>Critical Infrastructure and Equipment</b>	
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<b>Total:</b>	\$ <u>value</u>
<b>Critical Facilities</b>	
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<u>description</u>	\$ <u>value</u>
<b>Total:</b>	\$ <u>value</u>

### 1.3 PLANNING AND REGULATORY CAPABILITIES

The following existing codes, ordinances, policies or plans are applicable to this hazard mitigation plan:

- name of code, ordinance, policy or plan
- name of code, ordinance, policy or plan
- name of code, ordinance, policy or plan
- name of code, ordinance, policy or plan

### 1.4 FISCAL, ADMINISTRATIVE AND TECHNICAL CAPABILITIES

The jurisdiction participates in the Public Protection Class Rating System and currently has a rating of X. This rating was achieved in MONTH, YEAR. An assessment of fiscal capabilities is presented in Table 1-2. An assessment of administrative and technical capabilities is presented in Table 1-3.

**Table 1-2. Fiscal Capability**

Financial Resources	Accessible or Eligible to Use?
Capital Improvements Project Funding	Yes/No
Authority to Levy Taxes for Specific Purposes	Yes/No
User Fees for Water, Sewer, Gas or Electric Service	Yes/No
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Other	Yes/No (if yes, please specify)

**Commented [GK1]:** If you are not a Fire District, please delete this sentence.

**Commented [GK2]:** These are relatively rare. See - <http://www.msrb.org/glossary/definition/private-activity-bond-pab.aspx>

**Commented [GK3]:** You should list those that you know you qualify for and have received or plan to pursue. See - <http://mrsc.org/Home/Explore-Topics/Finance/Revenues/Grant-Resources-for-Washington-Local-Governments.aspx>

**Commented [GK4]:** See - <http://mrsc.org/Home/Explore-Topics/Planning/Land-Use-Administration/Impact-Fees/Types-of-Impact-Fees-and-Other-Sources-of-Public-F.aspx>



**Table 1-3. Administrative and Technical Capability**

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes/No	Insert appropriate information
Engineers or professionals trained in building or infrastructure construction practices	Yes/No	Insert appropriate information
Planners or engineers with an understanding of natural hazards	Yes/No	Insert appropriate information
Staff with training in benefit/cost analysis	Yes/No	Insert appropriate information
Surveyors	Yes/No	Insert appropriate information
Personnel skilled or trained in GIS applications	Yes/No	Insert appropriate information
Scientist familiar with natural hazards in local area	Yes/No	Insert appropriate information
Emergency manager	Yes/No	Insert appropriate information
Grant writers	Yes/No	Insert appropriate information
Other	Yes/No	Insert appropriate information

### 1.5 EDUCATION AND OUTREACH CAPABILITIES

An assessment of education and outreach capabilities is presented in [Table 1-4](#).

**Table 1-4. Education and Outreach**

Criteria	Response
Do you have a Public Information Officer or Communications Office?	Yes/No (if yes, please specify)
Do you have personnel skilled or trained in website development?	Yes/No (if yes, please specify)
Do you have hazard mitigation information available on your website?	Yes/No
<ul style="list-style-type: none"> <li>If yes, please briefly describe.</li> </ul>	Insert appropriate information
Do you utilize social media for hazard mitigation education and outreach?	Yes/No
<ul style="list-style-type: none"> <li>If yes, please briefly describe.</li> </ul>	Insert appropriate information
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	Yes/No
<ul style="list-style-type: none"> <li>If yes, please briefly specify.</li> </ul>	Insert appropriate information
Do you have any other programs already in place that could be used to communicate hazard-related information?	Yes/No
<ul style="list-style-type: none"> <li>If yes, please briefly describe.</li> </ul>	Insert appropriate information
Do you have any established warning systems for hazard events?	Yes/No
<ul style="list-style-type: none"> <li>If yes, please briefly describe.</li> </ul>	Insert appropriate information

### 1.6 INTEGRATION WITH OTHER PLANNING INITIATIVES

The following describe the jurisdiction’s process for integrating the hazard mitigation plan into existing plans and programs.

#### 1.6.1 Existing Integration

The following plans and programs currently integrate the goals, risk assessment and/or recommendations of the hazard mitigation plan:

- Name of plan or program—Brief description of how the plan/program is integrated with the hazard mitigation plan
- Name of plan or program—Brief description of how the plan/program is integrated with the hazard mitigation plan

### 1.6.2 Opportunities for Future Integration

The following plans and programs do not currently integrate the goals, risk assessment and/or recommendations of the hazard mitigation plan, but provide an opportunity for future integration:

- Name of plan or program—Brief description of how the plan/program can be integrated with the hazard mitigation plan
- Name of plan or program— Brief description of how the plan/program can be integrated with the hazard mitigation plan

## 1.7 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 1-5 lists all past occurrences of natural hazards within the jurisdiction.

Table 1-5. Natural Hazard Events				
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	
Insert event type		Date	\$	

**Commented [GK5]:** Note: If you do not have \$ estimates, please include a description of the impacts from the hazard event.

**1.8 JURISDICTION-SPECIFIC VULNERABILITIES**

Noted vulnerabilities the jurisdiction include:

- Insert as appropriate.

**1.9 HAZARD RISK RANKING**

Table 1-6 presents the ranking of the hazards of concern.

Table 1-6. Hazard Risk Ranking				
Rank	Hazard Type	Risk Rating Score (Probability x Impact)		Category
1	Insert hazard type			High/Medium/Low
2	Insert hazard type			High/Medium/Low
3	Insert hazard type			High/Medium/Low
4	Insert hazard type			High/Medium/Low
5	Insert hazard type			High/Medium/Low
6	Insert hazard type			High/Medium/Low
7	Insert hazard type			High/Medium/Low
8	Insert hazard type			High/Medium/Low
9	Insert hazard type			High/Medium/Low

**1.10 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS**

Table 1-7 lists the actions that make up the Municipal Jurisdiction Name hazard mitigation action plan. Table 1-8 identifies the priority for each action. Table 1-9 summarizes the mitigation actions by hazard of concern and the six mitigation types.

**Table 1-7. Hazard Mitigation Action Plan Matrix**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					
Action #	Description					

**Table 1-8. Mitigation Strategy Priority Schedule**

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority <sup>a</sup>	Grant Priority <sup>a</sup>

a. See the introduction to this volume for explanation of priorities.

**Table 1-9. Analysis of Mitigation Actions**

Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects

a. See the introduction to this volume for explanation of mitigation types.

### 1.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

### 1.12 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section

