
Appendix C1.
Annex Instructions and Templates for Municipalities

INSTRUCTIONS FOR COMPLETING MUNICIPALITY ANNEX TEMPLATE

This document provides instructions for city and county governments participating in multi-partner hazard mitigation planning. These instructions are intended for municipalities that do not have a FEMA approved hazard mitigation plan.

Assistance in completing the template will be available in the form of a workshop for all Planning Partners in November and technical assistance as requested and as funding allows. Any questions on completing the template should be directed to:

Rob Flaner
208.939.4391
Rob.Flaner@TetraTech.com

Fully completed templates must be completed and returned by:

Friday, January 17, 2014.

A NOTE ABOUT FORMATTING

The template for the jurisdiction 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.

Municipality Annex:

This document provides instructions for completing the jurisdictional annex template for city and county governments.

Please refer all questions to:

Rob Flaner
208.939.4391
rob.flaner@tetrattech.com

Please complete and return by:

Friday, January 17, 2014

Please email completed template to:

Kristen Gelino
425.482.7801
kristen.gelino@tetrattech.com

Associated Materials:

Along with the annex template and these instructions, you have been provided with other materials with information that is needed for completing the template. Be sure to review these materials before you begin the process of filling in the template:

- SHELVDUS historical event data
- Summary-of-loss matrix for the hazard mitigation plan,
- Results from the hazard mitigation plan questionnaire,
- Catalog of funding programs,
- Catalog of mitigation alternatives, and
- Fact sheet on Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Grant Program (PDM).

CHAPTER NUMBER AND TITLE

In the chapter title at the top of page 1, type in the complete official name of your jurisdiction (The City of Metropolis, Jefferson County, etc.), replacing the yellow, highlighted text.

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.

JURISDICTION PROFILE

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

Please be sure to include information about who will adopt the Plan and who will oversee plan implementation. Consider using the following sentence: _____ assumes responsibility for the adoption of this plan; _____ will oversee its implementation.

For each bullet point, please replace the highlighted, yellow text with your jurisdiction-specific information.

Example Jurisdiction Profile:

- **Date of Incorporation**—1858
- **Current Population**—17,289 as of July 2006
- **Population Growth**—Based on the data tracked by the California Department of Finance, Arcata has experienced a relatively flat rate of growth. The overall population has increased only 3.4% since 2000 and has averaged 0.74% per year from 1990 to 2007
- **Location and Description**—The City of Arcata is located on California's redwood coast, approximately 760 miles north of Los Angeles and 275 miles north of San Francisco. The nearest seaport is Eureka, five miles south on Humboldt Bay. Arcata is the home of Humboldt State University and is situated between the communities of McKinleyville to the north and Blue Lake to the east. It sits at the intersection of US Highway 101 and State Route 299.
- **Brief History**—The Arcata area was settled during the California gold rush in the 1850s as a supply center for miners. As the gold rush died down, timber and fishing became the area's major economic resource. Arcata was incorporated in 1858 and by 1913 the Humboldt Teachers College, a predecessor to today's Humboldt State University was founded in Arcata. Recently, the presence of the college has come to shape Arcata's population into a young, liberal, and educated crowd. In 1981 Arcata developed the Arcata Marsh and Wildlife sanctuary, an innovative environmentally friendly, sewage treatment enhancement system.
- **Climate**—Arcata'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 in the six-month period of November through April. The average year-round temperature is 59°F. Humidity averages between 72 and 87 percent. Prevailing winds are from the north, and average 5 mph.
- **Governing Body Format**—The City of Arcata is governed by a five-member City Council. The City consists of six departments: Finance, Environmental Services, Community Development, Public Works, Police and the City Manager's Office. The City has 13 Committees, Commissions and Task Forces, which report to the City Council.
- **Development Trends**—Anticipated development levels for Arcata are low to moderate, consisting primarily of residential development. The majority of recent development has been infill. Residentially, there has been a focus on affordable housing and a push for more secondary mother-in-law units on properties.

The City of Arcata adopted its general plan in July 2000. The 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 design review, redevelopment, and capital improvements, must be consistent with such a plan. Future growth and development in the City will be managed as identified in the general plan.

CAPABILITY ASSESSMENT

NOTE: Please do not attempt to complete this section of the template by yourself. You will need to reach out to other departments within your jurisdiction to find the answers to these questions. Departments such as, Planning, Public Works/Engineering, and Emergency Services are responsible for the implementation of many of the capabilities listed in this assessment. If you find that your jurisdiction does not have any of the listed capabilities, then ask yourself or the responsible department “why?” Remember, increasing capability is a way to reduce risk and is, therefore, a viable mitigation action.

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 initiatives. In Table 1-1, 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 or ordinance number and its date of adoption in the comments column. It is very important that you list the code citation as well as date of adoption. Identification of old codes often are leads to identifying mitigation actions. For example, if your flood damage prevention ordinance has a date of adoption prior to 2004, there is a good chance that the ordinance is out of compliance with the National Flood Insurance Program (NFIP). This should be addressed as an action in your action plan. If a code has been updated since its initial adoption date, please provide the date of the most recent update.
- **State or Federal Prohibitions**—Enter “Yes” if there are any state or federal regulations or laws that would prohibit local implementation of the identified item; otherwise, enter “No.”
- **Other Regulatory Authority**—Enter “Yes” if there are any regulations that may impact your initiative that are enforced or administered by another agency (e.g., a state agency or special purpose district); otherwise, enter “No.”
- **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.”

A Note On Planning Documents:

Comprehensive Plans - Jurisdictions that engage in comprehensive planning may wish to link their plan to the hazard mitigation plan. This linkage can occur in many related elements such as the safety element or in the critical areas discussion of the land use element.

Capital Improvement Programs – CIPs may address a variety of infrastructure such as sewer, water, drainage, roads and storm water. Capital Facilities Plans are a required element of the Washington State Growth Management Act; however, counties and municipalities may have differing definitions of “capital.”

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 initiatives.

Complete Table 1-2 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.

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 the implementation of specific mitigation actions.

Complete Table 1-3 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.

National Flood Insurance Program Compliance

For those communities that participate in the National Flood Insurance program (NFIP), this section will aid in meeting the requirements specified in 44CFR 201.6(c)(3)(ii), dealing with the maintenance of NFIP compliance. This section asks a series of questions aimed at identifying the community’s floodplain management program and any inherent needs within that program. Table 1-4 asks nine questions about the community floodplain management program. To complete this table, you will need to identify the department responsible for floodplain management within your jurisdiction. Guidance on how to respond to each of these questions is as follows:

<p>What department is responsible for floodplain management in your community?</p>	<p>All communities that participate in the NFIP must appoint a department that is responsible for the administration of its floodplain management program. This can be designated in the actual ordinance language. Places to check include; Building Department, Community Development, Public Works or Engineering Department</p>
<p>Who is your Community’s Floodplain Administrator? (Department/Position)</p>	<p>This position will be designated in the Community’s flood damage prevention ordinance. Please confirm that this position is still acting as the designated Flood Plain Administrator. If it is not, then you will need to amend your ordinance.</p>
<p>Do you have any Certified Floodplain Managers (CFM) on staff within your community?</p>	<p>The Association of State Floodplain Managers has established a national program for professional certification of floodplain managers. The program recognizes continuing education and professional development that enhance the knowledge and performance of local, state, federal, and private-sector floodplain managers. The role of the nation’s floodplain managers is expanding due to increases in disaster losses, the emphasis being placed upon mitigation to alleviate the cycle of damage-rebuild-damage, and a recognized need for professionals to adequately address these issues. This certification program lays the foundation for ensuring that highly qualified individuals are available to meet the challenge of breaking the damage cycle and stopping its negative drain on the nation’s human, financial, and natural resources.</p>
<p>What is the date of adoption of your flood damage prevention ordinance?</p>	<p>Check the date your floodplain management ordinance was last adopted/amended. Please site the code number and whether this date reflects the initial adoption date or an amendment date.</p>
<p>When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?</p>	<p>The CAV is the method utilized by FEMA to monitor NFIP compliance. CAV’s are supposed to occur every 3 to 5 years. They can be performed by the FEMA Regional Office or by the State Coordinating Agency. The best source for this information is your</p>

	<p>Community Floodplain Administrator. If she or he does not know, you should check with the State NFIP Coordinator:</p> <p>Scott McKinney, Washington Department of Ecology 360-407-6131 scott.mckinney@ecy.wa.gov</p>
<p>To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.</p>	<p>If any administrative problems or potential violations are identified during a CAV the community will be notified and given the opportunity to correct those administrative procedures and remedy the violations to the maximum extent possible within established deadlines. The best source for this information is your Community Floodplain Administrator. If she does not know, you should check with the State NFIP Coordinator.</p>
<p>Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why).</p>	<p>If you believe that the flood hazard maps for your community do not adequately address the flood risk, please provide an explanation. If you believe the maps do adequately address the flood risk within your community, please answer "Yes."</p>
<p>Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?</p>	<p>What do you need to make your floodplain management program better? Do you need staffing, training, better maps? This is the section where you identify needs. Needs result in actions. If you identify needs here, you should identify an action in your action plan to address those needs. It is plausible to answer "nothing" here. But to do so, you need to have a very well established floodplain management program or little or no floodplain to manage.</p>
<p>Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?</p>	<p>The CRS program is a part of the National Flood Insurance Program that rewards participating communities for exceeding the minimum requirements of the NFIP by lowering the cost of flood insurance premiums in participating jurisdictions. The CRS provides credit for 18, non-structural flood mitigation activities. The CRS program is voluntary, and communities must be in full compliance and good standing under the NFIP to be eligible to apply.</p>

Community Mitigation Related Classifications

The Planning Team will complete Table 1-5 to indicate your jurisdiction's participation in various national programs related to natural hazard mitigation. You do not need to provide information for this table.

JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Chronological List of Hazard Events

In Table 1-6, list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction since 1975. Include the date of the event and the estimated dollar amount of

damage it caused. Please refer to the summary of natural hazard events in the SHELDUS historical data included in your tool kit. 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.

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. The Planning Team will provide information regarding repetitive loss properties for your jurisdiction. Please do not worry about completing this portion of the template.

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. A detailed discussion of the concepts associated with risk ranking is provided in the overall hazard mitigation plan. The instructions below outline steps for assessing risk in your jurisdiction to develop results that are to be included in the template.

Determine Probability of Occurrence for Each Hazard

A probability factor is assigned based on how often a hazard is likely to occur. In Table 1, list the probability of occurrence for each hazard as it pertains to your jurisdiction, along with its probability factor, as follows:

- **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)

The probability of occurrence of a hazard event is generally based on past hazard events in an area. 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.

Hazard Type	Probability	Probability Factor

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. 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 was assigned a weighting factor of 1. Steps to assess each type of impact are described below.

Impacts on People

To assess impacts on 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. In Table 2, list the potential impact of each hazard on people in your jurisdiction, along with its impact factor, as follows:

- **High Impact**—30% or more of the population is exposed to a hazard (Impact Factor = 3)
- **Medium Impact**—15% to 29% of the population is exposed to a hazard (Impact Factor = 2)
- **Low Impact**—14% 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)

TABLE 2. HAZARD IMPACT ON PEOPLE			
Hazard Type	Impact	Impact Factor	Weighted Impact Factor (Unweighted Factor x 3)

Impacts on Property

To assess impacts on property, values are assigned based on the percentage of the total *property value exposed* to the hazard event. In Table 3, enter the cost estimates for potential damage to exposed structures, taken from the “Summary of Loss” matrix provided with these instructions.

TABLE 3. COST ESTIMATES FOR POTENTIAL DAMAGE TO STRUCTURES	
Hazard type	Estimate of Potential Dollar Losses to Exposed Structures

In Table 4, list the potential impact of each hazard on property in your jurisdiction, along with its impact factor. Determine impact based on damage estimates from Table 3, as follows:

- **High Impact**—25% or more of the total assessed property value is exposed to a hazard (Impact Factor = 3)

- **Medium Impact**—10% to 24% of the total assessed property value is exposed to a hazard (Impact Factor = 2)
- **Low Impact**—9% or less of the total assessed property value is exposed to the hazard (Impact Factor = 1)
- **No Impact**—None of the total assessed property value is exposed to a hazard (Impact Factor = 0)

Hazard Type	Impact	Impact Factor	Weighted Impact Factor (Unweighted Factor x 2)

Impacts on the Economy

To assess impacts on the economy, values are 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 assessed value of property in the county. For some hazards, such as wildland fire, landslide and severe weather, vulnerability is the same as exposure due to the lack of loss estimation tools specific to those hazards. In Table 5, list the potential impact of each hazard on the economy in your jurisdiction, along with its impact factor, as follows:

- **High Impact**—Estimated loss from the hazard is 15% or more of the total assessed property value (Impact Factor = 3)
- **Medium Impact**—Estimated loss from the hazard is 5% to 14% of the total assessed property value (Impact Factor = 2)
- **Low Impact**—Estimated loss from the hazard is 4% or less of the total assessed property value (Impact Factor = 1)
- **No Impact**—No loss is estimated from the hazard (Impact Factor = 0)

TABLE 5. HAZARD IMPACT ON THE ECONOMY			
Hazard Type	Impact	Impact Factor	Weighted Impact Factor (Unweighted Factor x 1)

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:

- Risk Rating = Probability Factor x Weighted Impact Factor {people + property + economy}

Using the results developed in Tables 1, 2, 4 and 5, complete Table 6 to calculate a risk rating for each hazard of concern.

TABLE 6. HAZARD RISK RATING			
Hazard Type	Probability Factor (P)	Sum of Weighted Impact Factors on People, Property & Economy (I)	Risk Rating (P x I)

Complete Risk Ranking in Template

Once Table 6 has been completed above, complete Table 1-7 in your template. The hazard with the highest risk rating in Table 6 should be listed at the top of Table 1-7 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.

It is 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 the comments at the end of the template. Remember, one of the purposes of this exercise is to support the selection and prioritization of initiatives in your plan. If you identify an initiative with a high priority that mitigates the risk of a hazard you have ranked low, that project will not be competitive in the grant arena.

HAZARD MITIGATION ACTION PLAN

Action Plan Matrix

Identify the initiatives 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 initiatives:

- Select initiatives that are consistent with the overall goals, objectives and vision of the hazard mitigation plan. The approved goals, objectives and vision are included in your tool kit.
- 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 the entire hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section.
- Although you should identify at least one initiative for your highest ranked risk, a hazard-specific project is not required for every hazard. 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 Initiative Descriptions:

Descriptions of your initiatives 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 initiative:

- **Initiative 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.
- **Initiative 2**—Perform a non-structural, seismic retrofit of City Hall.
- **Initiative 3**—Acquire floodplain property in the Smith subdivision.
- **Initiative 4**—Enhance the County flood warning capability by joining the NOAA "Storm Ready" program.

Complete Table 1-8 for all the initiatives you have identified:

- Enter the initiative number and description.

- Indicate whether the initiative mitigates hazards for new or existing assets.
- Identify the specific hazards the initiative will mitigate.
- Identify by number the mitigation plan objectives that the initiative addresses. The approved goals, objectives and vision are included in your tool kit.
- Indicate who will be the lead in administering the project. This will most likely be your governing body.
- 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 (Table 1-2) to identify possible sources of funding.
- Indicate the time line as “short term” (1 to 5 years) or “long term” (5 years or greater).

Technical assistance will be provided upon request.

Prioritization of Mitigation Initiatives

Complete the information in Table 1-9 as follows:

- **Initiative #**—Indicate the initiative number from Table 1-8.
- **# of Objectives Met**—Enter the number of objectives the initiative 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 (e.g., 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 part of, 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 Equal or 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 initiative currently budgeted for, or would it require a new budget authorization or funding from another source such as grants?
- **Priority**— Enter “High,” “Medium” or “Low” as follows:
 - **High:** Project meets multiple plan objectives, benefits exceed cost, funding is secured under existing programs, or is grant eligible, and project can be completed in 1 to 5 years (i.e., short term project) once funded.
 - **Medium:** Project meets at least 1 plan objective, benefits exceed costs, requires special funding authorization under existing programs, grant eligibility is questionable, and project can be completed in 1 to 5 years once funded.
 - **Low:** Project will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, project is not grant eligible, and time line for completion is long term (5 to 10 years).

This prioritization is a simple review to determine that the initiatives you have identified 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.

Analysis of Mitigation Actions

Complete Table 1-10 by 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.

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 such as EPA's Bio-terrorism assessment requirement for water districts.

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template.

As you complete your template, please forward it to:

Kristen Gelino, Tetra Tech, Inc.

425.482.7801

Kristen.Gelino@TetraTech.com

CHAPTER 1.

INSERT JURISDICTION NAME ANNEX

1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Name, Title
Street Address
City, State ZIP
Telephone: Phone #
e-mail Address: email address

Alternate Point of Contact

Name, Title
Street Address
City, State ZIP
Telephone: Phone #
e-mail Address: email address

1.2 JURISDICTION PROFILE

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

- **Date of Incorporation**—Insert Date of Incorporation
- **Current Population**—Insert Population as of Insert Date of Population Count
- **Population Growth**—Insert Discussion of Population Growth
- **Location and Description**—Insert Description of Location, Surroundings, Key Geographic Features
- **Brief History**—Insert Summary Discussion of Jurisdiction's History
- **Climate**—Insert Summary Discussion of Climate
- **Governing Body Format**—Insert Summary Description of Governing Body
- **Development Trends**—Insert Summary Description of Development

1.3 CAPABILITY ASSESSMENT

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 1-1. The assessment of the jurisdiction's fiscal capabilities is presented in Table 1-2. The assessment of the jurisdiction's administrative and technical capabilities is presented in Table 1-3. Information on the community's 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 Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements					
Building Code					
Zonings					
Subdivisions					
Stormwater Management					
Post Disaster Recovery					
Real Estate Disclosure					
Growth Management					
Site Plan Review					
Public Health and Safety					
Environmental Protection					
Planning Documents					
General or Comprehensive Plan					
	<i>Is the plan equipped to provide linkage to this mitigation plan?</i>				Yes or No
Floodplain or Basin Plan					
Stormwater Plan					
Capital Improvement Plan					
	<i>What types of capital facilities does the plan address? How often is the plan revised/updated?</i>				Yes or No
Habitat Conservation Plan					
Economic Development Plan					
Shoreline Management Plan					
Community Wildfire Protection Plan					
Response/Recovery Planning					
Comprehensive Emergency Management Plan					
Threat and Hazard Identification and Risk Assessment					
Terrorism Plan					
Post-Disaster Recovery Plan					
Continuity of Operations Plan					
Public Health Plans					

TABLE 1-2. FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	
Capital Improvements Project Funding	
Authority to Levy Taxes for Specific Purposes	
User Fees for Water, Sewer, Gas or Electric Service	
Incur Debt through General Obligation Bonds	
Incur Debt through Special Tax Bonds	
Incur Debt through Private Activity Bonds	
Withhold Public Expenditures in Hazard-Prone Areas	
State Sponsored Grant Programs	
Development Impact Fees for Homebuyers or Developers	
Other	

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		
Engineers or professionals trained in building or infrastructure construction practices		
Planners or engineers with an understanding of natural hazards		
Staff with training in benefit/cost analysis		
Surveyors		
Personnel skilled or trained in GIS applications		
Scientist familiar with natural hazards in local area		
Emergency manager		
Grant writers		

TABLE 1-4. NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your community?	
Who is your community's floodplain administrator? (department/position)	
Do you have any certified floodplain managers on staff in your community?	
What is the date of adoption of your flood damage prevention ordinance?	
When was the most recent Community Assistance Visit or Community Assistance Contact?	
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	

TABLE 1-5. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System			
Building Code Effectiveness Grading Schedule			
Public Protection			
Storm Ready			
Firewise			
Tsunami Ready (if applicable)			

1.4 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 1-6 lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: **Insert #**
- Number of FEMA-Identified Severe Repetitive Loss Properties: **Insert #**
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: **Insert #**

1.5 HAZARD RISK RANKING

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

Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. **Delete this paragraph if no maps available.**

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

1.6 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 1-8 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 1-9 identifies the priority for each initiative. Table 1-10 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

TABLE 1-8. HAZARD MITIGATION ACTION PLAN MATRIX						
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Initiative #—Description						
Initiative #—Description						
Initiative #—Description						
Initiative #—Description						
Initiative #—Description						
Initiative #—Description						
Initiative #—Description						
Initiative #—Description						

**TABLE 1-10.
ANALYSIS OF MITIGATION INITIATIVES**

Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Avalanche						
Dam Failure						
Drought						
Earthquake						
Flood						
Landslide						
Severe Weather						
Tsunami						
Volcano						
Wildfire						

a. See Chapter 1 for explanation of mitigation types.

**1.7 FUTURE NEEDS TO BETTER UNDERSTAND RISK/
VULNERABILITY**

Insert text, if any; delete section if not used

1.8 ADDITIONAL COMMENTS

Insert text, if any; delete section if not used

INSTRUCTIONS FOR COMPLETING MUNICIPALITY UPDATE ANNEX TEMPLATE

This document provides instructions for city and county governments participating in multi-partner hazard mitigation planning. These instructions are intended for municipalities that currently have a FEMA approved hazard mitigation plan.

Assistance in completing the template will be available in the form of a workshop for all Planning Partners in November and technical assistance as requested and as funding allows. Any questions on completing the template should be directed to:

Rob Flaner
208. 939.4391
Rob.Flaner@TetraTech.com

Fully completed templates must be completed and returned by:

Friday, January 17, 2014.

A NOTE ABOUT FORMATTING

The template for the municipal jurisdiction 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.

Municipality Update Annex:

This document provides instructions for completing the jurisdictional annex template for city and county governments.

Please refer all questions to:

Rob Flaner
208.939.4391
rob.flaner@tetratech.com

Please complete and return by:

Friday, January 17, 2013

Please email completed template to:

Kristen Gelino
425.482.7801
kristen.gelino@tetratech.com

Associated Materials:

Along with the annex template and these instructions, you have been provided with other materials with information that is needed for completing the template. Be sure to review these materials before you begin the process of filling in the template:

- SHELDDUS historical event data
- Summary-of-loss matrix for the hazard mitigation plan,
- Results from the hazard mitigation plan questionnaire,
- Catalog of funding programs,
- Catalog of mitigation alternatives, and
- Fact sheet on Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Grant Program (PDM).

CHAPTER NUMBER AND TITLE

In the chapter title at the top of page 1, type in the complete official name of your jurisdiction (The City of Metropolis, Jefferson County, etc.), replacing the yellow, highlighted text.

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.

JURISDICTION PROFILE

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

Please be sure to include information about who will adopt the Plan and who will oversee plan implementation. Consider using the following sentence: _____ assumes responsibility for the adoption of this plan; _____ will oversee its implementation.

For each bullet point, please replace the highlighted, yellow text with your jurisdiction-specific information.

Example Jurisdiction Profile:

- **Date of Incorporation**—1858
 - **Current Population**—17,289 as of July 2006
 - **Population Growth**—Based on the data tracked by the California Department of Finance, Arcata has experienced a relatively flat rate of growth. The overall population has increased only 3.4% since 2000 and has averaged 0.74% per year from 1990 to 2007
 - **Location and Description**—The City of Arcata is located on California's redwood coast, approximately 760 miles north of Los Angeles and 275 miles north of San Francisco. The nearest seaport is Eureka, five miles south on Humboldt Bay. Arcata is the home of Humboldt State University and is situated between the communities of McKinleyville to the north and Blue Lake to the east. It sits at the intersection of US Highway 101 and State Route 299.
 - **Brief History**—The Arcata area was settled during the California gold rush in the 1850s as a supply center for miners. As the gold rush died down, timber and fishing became the area's major economic resource. Arcata was incorporated in 1858 and by 1913 the Humboldt Teachers College, a predecessor to today's Humboldt State University was founded in Arcata. Recently, the presence of the college has come to shape Arcata's population into a young, liberal, and educated crowd. In 1981 Arcata developed the Arcata Marsh and Wildlife sanctuary, an innovative environmentally friendly, sewage treatment enhancement system.
 - **Climate**—Arcata'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 in the six-month period of November through April. The average year-round temperature is 59°F. Humidity averages between 72 and 87 percent. Prevailing winds are from the north, and average 5 mph.
 - **Governing Body Format**—The City of Arcata is governed by a five-member City Council. The City consists of six departments: Finance, Environmental Services, Community Development, Public Works, Police and the City Manager's Office. The City has 13 Committees, Commissions and Task Forces, which report to the City Council.
 - **Development Trends**—Anticipated development levels for Arcata are low to moderate, consisting primarily of residential development. The majority of recent development has been infill. Residentially, there has been a focus on affordable housing and a push for more secondary mother-in-law units on properties.
- The City of Arcata adopted its general plan in July 2000. The 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 design review, redevelopment, and capital improvements, must be consistent with such a plan. Future growth and development in the City will be managed as identified in the general plan.

CAPABILITY ASSESSMENT

NOTE: Please do not attempt to complete this section of the template by yourself. You will need to reach out to other departments within your jurisdiction to find the answers to these questions. Departments such as, Planning, Public Works/Engineering, and Emergency Services are responsible for the implementation of many of the capabilities listed in this assessment. If you find that your jurisdiction does not have any of the listed capabilities, then ask yourself or the responsible department “why?” Remember, increasing capability is a way to reduce risk and is, therefore, a viable mitigation action.

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 initiatives. In Table I-1, 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 or ordinance number and its date of adoption in the comments column. It is very important that you list the code citation as well as date of adoption. Identification of old codes often are leads to identifying mitigation actions. For example, if your flood damage prevention ordinance has a date of adoption prior to 2004, there is a good chance that the ordinance is out of compliance with the National Flood Insurance Program (NFIP). This should be addressed as an action in your action plan. If a code has been updated since its initial adoption date, please provide the date of the most recent update.
- A Note On Planning Documents:***

Comprehensive Plans - Jurisdictions that engage in comprehensive planning may wish to link their plan to the hazard mitigation plan. This linkage can occur in many related elements such as the safety element or in the critical areas discussion of the land use element.

Capital Improvement Programs – CIPs may address a variety of infrastructure such as sewer, water, drainage, roads and storm water. Capital Facilities Plans are a required element of the Washington State Growth Management Act; however, counties and municipalities may have differing definitions of “capital.”
- **State or Federal Prohibitions**—Enter “Yes” if there are any state or federal regulations or laws that would prohibit local implementation of the identified item; otherwise, enter “No.”
 - **Other Regulatory Authority**—Enter “Yes” if there are any regulations that may impact your initiative that are enforced or administered by another agency (e.g., a state agency or special purpose district); otherwise, enter “No.”
 - **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.”

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 initiatives.

Complete Table 1-2 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.

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 the implementation of specific mitigation actions.

Complete Table 1-3 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.

National Flood Insurance Program Compliance

For those communities that participate in the National Flood Insurance program (NFIP), this section will aid in meeting the requirements specified in 44CFR 201.6(c)(3)(ii), dealing with the maintenance of NFIP compliance. This section asks a series of questions aimed at identifying the community’s floodplain management program and any inherent needs within that program. Table 1-4 asks nine questions about the community floodplain management program. To complete this table, you will need to identify the department responsible for floodplain management within your jurisdiction. Guidance on how to respond to each of these questions is as follows:

<p>What department is responsible for floodplain management in your community?</p>	<p>All communities that participate in the NFIP must appoint a department that is responsible for the administration of its floodplain management program. This can be designated in the actual ordinance language. Places to check include; Building Department, Community Development, Public Works or Engineering Department</p>
<p>Who is your Community’s Floodplain Administrator? (Department/Position)</p>	<p>This position will be designated in the Community’s flood damage prevention ordinance. Please confirm that this position is still acting as the designated Flood Plain Administrator. If it is not, then you will need to amend your ordinance.</p>
<p>Do you have any Certified Floodplain Managers (CFM) on staff within your community?</p>	<p>The Association of State Floodplain Managers has established a national program for professional certification of floodplain managers. The program recognizes continuing education and professional development that enhance the knowledge and performance of local, state, federal, and private-sector floodplain managers. The role of the nation’s floodplain managers is expanding due to increases in disaster losses, the emphasis being placed upon mitigation to alleviate the cycle of damage-rebuild-damage, and a recognized need for professionals to adequately address these issues. This certification program lays the foundation for ensuring that highly qualified individuals are available to meet the challenge of breaking the damage cycle and stopping its negative drain on the nation’s human, financial, and natural resources.</p>
<p>What is the date of adoption of your flood damage prevention ordinance?</p>	<p>Check the date your floodplain management ordinance was last adopted/amended. Please site the code number and whether this date reflects the initial adoption date or an amendment date.</p>
<p>When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?</p>	<p>The CAV is the method utilized by FEMA to monitor NFIP compliance. CAV’s are supposed to occur every 3 to 5 years. They can be performed by the FEMA Regional Office or by the State Coordinating Agency. The best source for this information is your</p>

	<p>Community Floodplain Administrator. If she or he does not know, you should check with the State NFIP Coordinator:</p> <p>Scott McKinney, Washington Department of Ecology 360-407-6131 scott.mckinney@ecy.wa.gov</p>
<p>To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.</p>	<p>If any administrative problems or potential violations are identified during a CAV the community will be notified and given the opportunity to correct those administrative procedures and remedy the violations to the maximum extent possible within established deadlines. The best source for this information is your Community Floodplain Administrator. If she does not know, you should check with the State NFIP Coordinator.</p>
<p>Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why).</p>	<p>If you believe that the flood hazard maps for your community do not adequately address the flood risk, please provide an explanation. If you believe the maps do adequately address the flood risk within your community, please answer "Yes."</p>
<p>Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?</p>	<p>What do you need to make your floodplain management program better? Do you need staffing, training, better maps? This is the section where you identify needs. Needs result in actions. If you identify needs here, you should identify an action in your action plan to address those needs. It is plausible to answer "nothing" here. But to do so, you need to have a very well established floodplain management program or little or no floodplain to manage.</p>
<p>Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?</p>	<p>The CRS program is a part of the National Flood Insurance Program that rewards participating communities for exceeding the minimum requirements of the NFIP by lowering the cost of flood insurance premiums in participating jurisdictions. The CRS provides credit for 18, non-structural flood mitigation activities. The CRS program is voluntary, and communities must be in full compliance and good standing under the NFIP to be eligible to apply.</p>

Community Mitigation Related Classifications

The Planning Team will complete Table 1-5 to indicate your jurisdiction's participation in various national programs related to natural hazard mitigation. You do not need to provide information for this table.

JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Chronological List of Hazard Events

In Table 1-6, list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction since 1975. Include the date of the event and the estimated dollar amount of

damage it caused. Please refer to the summary of natural hazard events in the SHELDUS historical data included in your tool kit. 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.

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. The Planning Team will provide information regarding repetitive loss properties for your jurisdiction. Please do not worry about completing this portion of the template.

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. A detailed discussion of the concepts associated with risk ranking is provided in the overall hazard mitigation plan. The instructions below outline steps for assessing risk in your jurisdiction to develop results that are to be included in the template.

Determine Probability of Occurrence for Each Hazard

A probability factor is assigned based on how often a hazard is likely to occur. In Table 1, list the probability of occurrence for each hazard as it pertains to your jurisdiction, along with its probability factor, as follows:

- **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)

The probability of occurrence of a hazard event is generally based on past hazard events in an area. 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.

TABLE 2. HAZARD IMPACT ON PEOPLE			
Hazard Type	Impact	Impact Factor	Weighted Impact Factor (Unweighted Factor x 3)

Impacts on Property

To assess impacts on property, values are assigned based on the percentage of the total *property value exposed* to the hazard event. In Table 3, enter the cost estimates for potential damage to exposed structures, taken from the “Summary of Loss” matrix provided with these instructions.

TABLE 3. COST ESTIMATES FOR POTENTIAL DAMAGE TO STRUCTURES	
Hazard type	Estimate of Potential Dollar Losses to Exposed Structures

In Table 4, list the potential impact of each hazard on property in your jurisdiction, along with its impact factor. Determine impact based on damage estimates from Table 3, as follows:

- **High Impact**—25% or more of the total assessed property value is exposed to a hazard (Impact Factor = 3)

- **Medium Impact**—10% to 24% of the total assessed property value is exposed to a hazard (Impact Factor = 2)
- **Low Impact**—9% or less of the total assessed property value is exposed to the hazard (Impact Factor = 1)
- **No Impact**—None of the total assessed property value is exposed to a hazard (Impact Factor = 0)

Hazard Type	Impact	Impact Factor	Weighted Impact Factor (Unweighted Factor x 2)

Impacts on the Economy

To assess impacts on the economy, values are 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 assessed value of property in the county. For some hazards, such as wildland fire, landslide and severe weather, vulnerability is the same as exposure due to the lack of loss estimation tools specific to those hazards. In Table 5, list the potential impact of each hazard on the economy in your jurisdiction, along with its impact factor, as follows:

- **High Impact**—Estimated loss from the hazard is 15% or more of the total assessed property value (Impact Factor = 3)
- **Medium Impact**—Estimated loss from the hazard is 5% to 14% of the total assessed property value (Impact Factor = 2)
- **Low Impact**—Estimated loss from the hazard is 4% or less of the total assessed property value (Impact Factor = 1)
- **No Impact**—No loss is estimated from the hazard (Impact Factor = 0)

TABLE 5. HAZARD IMPACT ON THE ECONOMY			
Hazard Type	Impact	Impact Factor	Weighted Impact Factor (Unweighted Factor x 1)

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:

- Risk Rating = Probability Factor x Weighted Impact Factor {people + property + economy}

Using the results developed in Tables 1, 2, 4 and 5, complete Table 6 to calculate a risk rating for each hazard of concern.

TABLE 6. HAZARD RISK RATING			
Hazard Type	Probability Factor (P)	Sum of Weighted Impact Factors on People, Property & Economy (I)	Risk Rating (P x I)

Complete Risk Ranking in Template

Once Table 6 has been completed above, complete Table 1-7 in your template. The hazard with the highest risk rating in Table 6 should be listed at the top of Table 1-7 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.

It is 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 the comments at the end of the template. Remember, one of the purposes of this exercise is to support the selection and prioritization of initiatives in your plan. If you identify an initiative with a high priority that mitigates the risk of a hazard you have ranked low, that project will not be competitive in the grant arena.

STATUS OF PREVIOUS PLAN INITIATIVES

In this section, 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. Enter all the recommended actions from your previous plan in Table 1-8 and put a ✓ 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”).
- **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.”)

HAZARD MITIGATION ACTION PLAN

Action Plan Matrix

Identify the initiatives 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 initiatives:

- Select initiatives that are consistent with the overall goals, objectives and vision of the hazard mitigation plan. The approved goals, objectives and vision are included in your tool kit.

- 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 the entire hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section.
- Although you should identify at least one initiative for your highest ranked risk, a hazard-specific project is not required for every hazard. 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.

Complete Table 1-9 for all the initiatives you have identified:

- Enter the initiative number and description.
- Indicate whether the initiative mitigates hazards for new or existing assets.
- Identify the specific hazards the initiative will mitigate.
- Identify by number the mitigation plan objectives that the initiative addresses. The approved goals, objectives and vision are included in your tool kit.
- Indicate who will be the lead in administering the project. This will most likely be your governing body.
- 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 (Table 1-2) to identify possible sources of funding.
- Indicate the time line as “short term” (1 to 5 years) or “long term” (5 years or greater).
- Enter “Yes” or “No” to indicate whether this initiative was included in the previous version of this hazard mitigation plan.

Wording Your Initiative Descriptions:

Descriptions of your initiatives 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 initiative:

- **Initiative 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.
- **Initiative 2**—Perform a non-structural, seismic retrofit of City Hall.
- **Initiative 3**—Acquire floodplain property in the Smith subdivision.
- **Initiative 4**—Enhance the County flood warning capability by joining the NOAA “Storm Ready” program.

Technical assistance will be provided upon request.

Prioritization of Mitigation Initiatives

Complete the information in Table 1-10 as follows:

- **Initiative #**—Indicate the initiative number from Table 1-9.
- **# of Objectives Met**—Enter the number of objectives the initiative 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 (e.g., 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 part of, 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 initiative currently budgeted for, or would it require a new budget authorization or funding from another source such as grants?
- **Priority**— Enter “High,” “Medium” or “Low” as follows:
 - **High:** Project meets multiple plan objectives, benefits exceed cost, funding is secured under existing programs, or is grant eligible, and project can be completed in 1 to 5 years (i.e., short term project) once funded.
 - **Medium:** Project meets at least 1 plan objective, benefits exceed costs, requires special funding authorization under existing programs, grant eligibility is questionable, and project can be completed in 1 to 5 years once funded.
 - **Low:** Project will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, project is not grant eligible, and time line for completion is long term (5 to 10 years).

This prioritization is a simple review to determine that the initiatives you have identified 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.

Analysis of Mitigation Actions

Complete Table 1-11 by 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.

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 such as EPA's Bio-terrorism assessment requirement for water districts.

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template.

CHAPTER 1.

INSERT JURISDICTION NAME UPDATE ANNEX

1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Name, Title
Street Address
City, State ZIP
Telephone: Phone #
e-mail Address: email address

Alternate Point of Contact

Name, Title
Street Address
City, State ZIP
Telephone: Phone #
e-mail Address: email address

1.2 JURISDICTION PROFILE

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

- **Date of Incorporation**—Insert Date of Incorporation
- **Current Population**—Insert Population as of Insert Date of Population Count
- **Population Growth**—Insert Discussion of Population Growth
- **Location and Description**—Insert Description of Location, Surroundings, Key Geographic Features
- **Brief History**—Insert Summary Discussion of Jurisdiction's History
- **Climate**—Insert Summary Discussion of Climate
- **Governing Body Format**—Insert Summary Description of Governing Body
- **Development Trends**—Insert Summary Description of Development

1.3 CAPABILITY ASSESSMENT

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 1-1. The assessment of the jurisdiction's fiscal capabilities is presented in Table 1-2. The assessment of the jurisdiction's administrative and technical capabilities is presented in Table 1-3. Information on the community's 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 Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements					
Building Code					
Zonings					
Subdivisions					
Stormwater Management					
Post Disaster Recovery					
Real Estate Disclosure					
Growth Management					
Site Plan Review					
Public Health and Safety					
Environmental Protection					
Planning Documents					
General or Comprehensive Plan					
	<i>Is the plan equipped to provide linkage to this mitigation plan?</i>				Yes or No
Floodplain or Basin Plan					
Stormwater Plan					
Capital Improvement Plan					
	<i>What types of capital facilities does the plan address? How often is the plan revised/updated?</i>				Yes or No
Habitat Conservation Plan					
Economic Development Plan					
Shoreline Management Plan					
Community Wildfire Protection Plan					
Response/Recovery Planning					
Comprehensive Emergency Management Plan					
Threat and Hazard Identification and Risk Assessment					
Terrorism Plan					
Post-Disaster Recovery Plan					
Continuity of Operations Plan					
Public Health Plans					

TABLE 1-2. FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	
Capital Improvements Project Funding	
Authority to Levy Taxes for Specific Purposes	
User Fees for Water, Sewer, Gas or Electric Service	
Incur Debt through General Obligation Bonds	
Incur Debt through Special Tax Bonds	
Incur Debt through Private Activity Bonds	
Withhold Public Expenditures in Hazard-Prone Areas	
State Sponsored Grant Programs	
Development Impact Fees for Homebuyers or Developers	
Other	

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		
Engineers or professionals trained in building or infrastructure construction practices		
Planners or engineers with an understanding of natural hazards		
Staff with training in benefit/cost analysis		
Surveyors		
Personnel skilled or trained in GIS applications		
Scientist familiar with natural hazards in local area		
Emergency manager		
Grant writers		

TABLE 1-4. NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your community?	
Who is your community's floodplain administrator? (department/position)	
Do you have any certified floodplain managers on staff in your community?	
What is the date of adoption of your flood damage prevention ordinance?	
When was the most recent Community Assistance Visit or Community Assistance Contact?	
To the best of your knowledge, does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	
Do your flood hazard maps adequately address the flood risk within your community? (If no, please state why)	
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	
Does your community participate in the Community Rating System (CRS)? If so, is your community seeking to improve its CRS Classification? If not, is your community interested in joining the CRS program?	

TABLE 1-5. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System			
Building Code Effectiveness Grading Schedule			
Public Protection			
Storm Ready			
Firewise			
Tsunami Ready (if applicable)			

1.4 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 1-6 lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: **Insert #**
- Number of FEMA-Identified Severe Repetitive Loss Properties: **Insert #**
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: **Insert #**

1.5 HAZARD RISK RANKING

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

Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. **Delete this paragraph if no maps available.**

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

1.7 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 1-9 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 1-10 identifies the priority for each initiative. Table 1-11 summarizes the mitigation initiatives 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	Included in Previous Plan?
Initiative #—Description							
Initiative #—Description							
Initiative #—Description							
Initiative #—Description							
Initiative #—Description							
Initiative #—Description							
Initiative #—Description							
Initiative #—Description							

**TABLE 1-11.
ANALYSIS OF MITIGATION INITIATIVES**

Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Avalanche						
Dam Failure						
Drought						
Earthquake						
Flood						
Landslide						
Severe Weather						
Tsunami						
Volcano						
Wildfire						

a. See Chapter 1 for explanation of mitigation types.

**1.8 FUTURE NEEDS TO BETTER UNDERSTAND RISK/
VULNERABILITY**

Insert text, if any; delete section if not used

1.9 ADDITIONAL COMMENTS

Insert text, if any; delete section if not used