APPENDIX A.
PLANNING PARTNER EXPECTATIONS, TEMPLATES AND INSTRUCTIONS

PLANNING PARTNER EXPECTATIONS

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 (i.e. DMA compliance) 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 after November 1, 2004. Whether our planning process generates 10 individual plans or 1 large plan that has a chapter for each partner jurisdiction, the following items must be addressed to achieve DMA compliance for each Coalition member:

- ✓ 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).

- ✓ 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 compliment the hazard mitigation initiatives selected (i.e.: comp plans, basin plans or hazard specific plans).

- ✓ Personalize the Risk Assessment for each jurisdiction. Remove hazards not associated with the defined area or redefine 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.

- ✓ Personalize mitigation recommendations. Identify and prioritize mitigation recommendations specific to the each jurisdiction's defined area.

- ✓ Create an Action Plan.

- ✓ Each jurisdiction must present the Plan to the public for comment at least once, within 2 weeks prior to adoption.

- ✓ Plan must be adopted

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. There will most likely be a need for a monetary contribution by some if not all committed planning partners. This amount cannot be determined until we determine the actual number of partners that will commit to this process. This issue will have to be addressed once the planning area is defined, and will most likely be the first order of business addressed by the Steering Committee selected to oversee the development of this plan.

With the above requirements in mind, each partner is expected to aid this process by being prepared to develop its section of the plan. Each Planning Partner should expect to provide the following:

A. Provide a "Letter of Intent to Participate" or Resolution to participate to the Humboldt County Planning Team.

B. Support and participate in the selection and function of the Steering Committee selected to oversee the development of this plan.

C. Provide support in the form of mailing list, possible meeting space, media such as newsletters, newspapers or direct mailed brochures, required to implement the public involvement strategy formed by the Steering Committee.

D. 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 tracked. These attendance records will be used to track and 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 opportunities.

E. All technical studies, plans, ordinances specific to hazards identified within the defined planning area. Each partner will be expected to perform a "consistency review" of all such documents to determine the existence of plans, studies or ordinances 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.

F. 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.

G. 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.

H. 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.

I. Each partner will be required to sponsor at least one public meeting to present the draft plan at least 2 weeks prior to adoption.

J. 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.

Once this plan is completed, and DMA compliance has been determined for each partner, maintaining that eligibility will be dependant upon each partner implementing the plan implementation-maintenance protocol identified in the plan. At a minimum, this means completing the on-going 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 this lose their DMA eligibility.

Partner City/County Template

(Insert City/County name)

A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	**Alternate Point of Contact**
Name: Title: Mailing Address: Telephone #: E-mail Address	Name: Title: Mailing Address: Telephone #: E-mail Address

B.) CITY/COUNTY PROFILE

Population: _____ (As of _____)

(Insert text profile of community as described in instructions)

C.) NATURAL HAZARD EVENT HISTORY SPECIFIC TO THE CITY/COUNTY

NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment

Number of FEMA Identified Repetitive Flood Loss Properties:

Number of Repetitive Flood Loss Properties that have been mitigated:

D.) NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

NATURAL HAZARD RISK RANKING				
Rank #	Hazard type	Estimate of potential dollar losses to structures vulnerable to the hazard	Probability of Occurrence[a]	Risk Rating Score (Probability x Impact)
1				
2				
3				
4				
5				

a. High - Hazard event is likely to occur within 25 years; Medium – Hazard event is likely to occur within 100 years; Low – Hazard event in not likely to occur within 100 years

E.) CAPABILITY ASSESSMENT

E.1) Legal and Regulatory Capability

LEGAL AND REGULATORY CAPABILITY					
Regulatory Tools (Codes, Ordinances. Plans)	Local Authority (Y or N)	Prohibitions (State or Federal)	Other Jurisdictional Authority (Y or N)	State Mandated	Comments
1.) Building Code					
2.) Zoning Ordinance					
3.) Subdivision Ordinance					
4.) Special Purpose Ordinances (floodplain management, critical or sensitive areas)					
5.) Growth Management					
6.) Floodplain Management or Basin plan					
7.) Stormwater Management Plan					
8.) General Plan or Comprehensive Plan					
9.) Capital Improvements Plan					
10.) Site Plan review requirements					

LEGAL AND REGULATORY CAPABILITY					
Regulatory Tools (Codes, Ordinances. Plans)	Local Authority (Y or N)	Prohibitions (State or Federal)	Other Jurisdictional Authority (Y or N)	State Mandated	Comments
11.) Habitat Conservation Plan					
12.) Economic development plan					
13.) Emergency Response plan					
14.) Shoreline Management Plan					
15.) Post Disaster Recovery Plan					
16.) Post Disaster Recovery Ordinance					
17.) Real Estate Disclosure requirement					

E.2) Administrative and Technical Capability

ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resources	Available (Y or N)	Department/Agency/Position
1.) Planner(s) or Engineer(s) with knowledge of land development and land management practices		
2.) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure		
3.) Planners or engineers with an understanding of natural hazards		
4.) Floodplain Manager		
5.) Surveyor(s)		
6.) Personnel skilled or trained in “GIS” applications		
7.) Scientist familiar with natural hazards in Humboldt County		
8.) Emergency Manager		
9.) Grant Writer(s)		
10.) Staff with expertise or training in benefit/cost analysis		

E.3) Fiscal Capability

FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use (Yes/No/Don't know)
1.) Community Development Block Grants (CDBG)	
2.) Capital Improvements Project Funding	
3.) Authority to Levy Taxes for specific Purposes	
4.) User fees for water, sewer, gas or electric service	
5.) Impact fees for homebuyers or developers of new development/homes	
6.) Incur debt through general obligation bonds	
7.) Incur debt through special tax bonds	
8.) Incur debt through private activity bonds	
9.) Withhold public expenditures in hazard-prone areas	
10.) State sponsored grant programs	
11.) Other	

E.4 Community Mitigation Related Classifications

COMMUNITY CLASSIFICATIONS		
Program	Classification	Date Classified
Community Rating System (CRS)		
Building Code Effectiveness Grading Schedule (BCEGS)		
Public Protection		
Storm Ready		
Firewise		
Tsunami Ready		

F.) HAZARD MITIGATION ACTION PLAN

HAZARD MITIGATION ACTION PLAN MATRIX

Initiative	Mitigation Initiative	Hazard(s) Mitigated	Objectives Met	Lead Agency	Estimated Cost	Possible Funding Sources or Resources	Timeline[a]

a. "Short term" = 1 to 5 years; "Long Term"= 5 years or greater, "OG" = Ongoing program

G.) PRIORITIZATION OF MITIGATION INITIATIVES

PRIORITIZATION OF MITIGATION INITIATIVES

Initiative #	# of Objectives met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)

Explanation of priorities

- **High Priority**—A project that meets multiple objectives (i.e., multiple hazards), benefits exceeds cost, has funding secured or is an ongoing project and project meets eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation Grant Program (PDM) programs. High priority projects can be completed in the short term (1 to 5 years).
- **Medium Priority**—A project that meets goals and objectives, benefits exceeds costs, funding has not been secured but project is grant eligible under, HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is completed. Medium priority projects will become high priority projects once funding is secured.
- **Low Priority**—Any project that will mitigate the risk of a hazard, benefits do not exceed the costs or are difficult to quantify, funding has not been secured and project is not eligible for HMGP or PDM grant funding, and time line for completion is considered long term (1 to 10 years). Low priority projects may be eligible other sources of grant funding from other programs. A low priority project could become a high priority project once funding is secured as long as it could be completed in the short term.

H.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

I.) ADDITIONAL COMMENTS

PARTNER CITY/COUNTY TEMPLATE

Instructions for completion

The following are instructions for the completion of the Partner City/County annex template that will need to be completed for each partner City and the County in the Humboldt County Natural Hazards Mitigation plan. The purpose of these instructions is to guide each Partner in the preparation of the information required for Disaster Mitigation Act (DMA) compliance. Each Partner should try to complete as much of the information as possible. Technical assistance will be available to each planning partner in the form of a workshop and/or a technical assistance visit with each partner depending on funding availability. Each planning partner should have completed the following prior to completion of this template:

Reviewed the draft Risk Assessment for Humboldt County.

Reviewed the Results from the Hazard Mitigation Plan Questionnaire.

Review of the catalog of mitigation alternatives.

Any questions on what is required or how to complete this document should be directed to:

Rob Flaner, CFM

Tetra Tech Inc.

90 South Blackwood Ave.

Eagle, ID 83616

(208) 939-4391

e-mail: rflaner@msn.com

This template has been set up as a word document in a format that will be used in the final plan. Each Partner is asked to use this template with no other derivations or versions so that a uniform product will be completed for each partner. Please provide both a hard copy and digital copy of the completed template to Tetra Tech upon completion. If a Partner does not have "Word" capability, prepare the document in whatever format you do have and the planning team will convert it to the Word format.

Instructions:

Title Block: In the Title box, type in the complete official name of your Jurisdiction (i.e., The City of Arcata, The City of Eureka, Humboldt County, etc.). At this time, also change the name in the "header" box to coincide with this title.

A.) Hazard Mitigation Plan Point of Contact

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

In addition, designate an alternate point of contact. This would be the person to contact should the primary point of contact is not available, or no longer employed by the community.

B.) City/County Profile

Complete the population box. State the most current population figure for your community based on an official means of tracking (i.e.: US census of California Office of Financial Management). Indicate when this population was, "as of". In this section please provide a profile of your community. Provide information specific to your community that was not provided in the risk assessment such as:

- Location within Humboldt County
- Date of Incorporation
- Brief history
- Geographical area
- Climate
- Growth Rate
- Development trends
- Governing body format

C.) Natural Hazard Event History

List in chronological order (most recent first) any natural hazard event that has occurred since 1975 that caused damage to your Community. Include the date of the event and the ***estimated*** dollar amount of damage it caused. Please refer to the summary of natural hazard events within Humboldt County included in the Draft Risk Assessment. Sources of damage information could include:

- Preliminary damage estimates (PDA's) filed by your community to County and California OES.
- Insurance claims data.
- Newspaper archives.
- Other plans/documents that deal with emergency management (i.e.: safety elements, emergency response plans)

Also under this section, indicate whether or not your community has any FEMA identified Repetitive Flood Loss properties. A repetitive Loss property is any property that has had 2 or more flood insurance claims paid in excess of $1000 in any rolling 10-year period since 1978. If you have identified RL properties, indicate the number (your technical assistance provider will be able to help you confirm this information). If you have none, indicate "none" in the box. Next, indicate the number (if any) of your Repetitive Loss structures have been mitigated. Mitigated for this exercise means, flood protection has been provided to the structure from the source of flood damage potential.

D.) Natural Hazard Risk/Vulnerability Risk Ranking

Under this step, a ranking of risk will be performed as it pertains to your community. A county –wide risk ranking has been performed for the entire planning areas and is contained in the risk assessment chapter of volume 1 of the plan. However, each community will have differing degrees of risk exposure and vulnerability aside from the whole, and therefore will need to rank the degree of risk to each hazard as it pertains to them. This will allow for the appropriate selection and prioritization of initiatives that will reduce the highest levels of risk for each community. The exact same methodology that will be applied to the county-wide risk ranking will be applied to each planning partner. This will assure consistency in the overall ranking of risk.

This risk ranking exercise serves two purposes: To describe the probability of occurrence for each hazard and to describe the impact each would have on the people, property and economy of Humboldt County. Estimates of risk for Humboldt County were developed using methodologies promoted by FEMA's hazard mitigation planning guidance and generated by FEMA's HAZUS-MH risk assessment tool.

This risk ranking exercise works under the following parameters:

- Impacts are evaluated with an emphasis on property. The primary purpose for this is that FEMA mitigation programs focus on loss reduction to improved property, critical facilities and critical infrastructure. This is not to say that FEMA is not concerned about life safety issues, because they are. However, Stafford Act mitigation programs focus on property because it is generally accepted that life safety initiatives are addressed in the preparedness and response components of FEMA and DHS Emergency Management programs.
- To be able to quantitatively rank risk, you must be able to generate measurable components to quantify. For improved property, this is fairly easy in that you apply an estimated damage function, to a determined value of property and you get a loss estimate. Since buildings don't voluntarily move, you can inventory buildings at risk based on their location to determine exposure. These approaches are measurable, quantifiable, and regionally consistent. The same can not be said for less tangible components such as people or economy.
- The reason we want to attempt to quantitatively rank risk is create a consistent platform that can be justified for all the partners in this planning effort. A more subjective approach eliminates consistency. Regional consistency is a primary objective for multi-jurisdictional planning effort. By having quantifiable results that have been generated using substantiated data, you are better able to justify initiatives and their priorities.

Probability of Occurrence

The probability of occurrence of a hazard event provides an estimation of how often the event occurs. This is generally based on the past hazard events that have occurred in the area and the forecast of the event occurring in the future. This is done by assigning a probability factor, which is based on yearly values of occurrence. The numerical value assigned to each category will be used to determine the risk rating of each hazard. In table 1, Table 1 lists the probability of occurrence for each hazard as it pertains to your community. This would be the occurrence of an event that caused property damage within your jurisdiction. These values were assigned by high, medium and low occurrence:

- High—Hazard event is likely to occur within 25 years **(Numerical value =3)**
- Medium—Hazard event is likely to occur within 100 years **(Numerical value =2)**
- Low—Hazard event is not likely to occur within 100 years **(Numerical value =1)**

- No exposure—If there is no exposure to a hazard, there is no probability of occurrence **(Numerical value = 0)**

For example: If you community has experienced 2 damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your community has experienced no damages from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category.

TABLE 1.
PROBABILITY OF HAZARDS

Hazard Event	Probability	Numerical Value
Drought	High	
Earthquake	High	
Fish Losses	Low	
Flood	High	
Landslide	Medium	
Severe Weather	High	
Tsunami	Medium	
Wild Fire	High	

IMPACT

The impact of each hazard was divided into three categories: impacts on people, property or the economy. Tables 2, 3 and 4 summarize the identified impacts for each hazard. These categories were also assigned weighted values. Impact on people was given a weighted factor of 3, impact on property was given a weight of 2 and impact on the economy was given a weighted factor of 1.

For impact of people, the values were assigned based on the percentage of the total population of your jurisdiction that may be directly impacted by a hazard event. For the purposes of this exercise, "impacted means exposed. We are not attempting to quantify the impact for this step. If a person is exposed to a hazard because they live in a hazard zone, they will be impacted when that event occurs. The degree of that impact will vary and is not measurable. Therefore, we will focus solely on exposure for this step. For example, if 50% or more of your population is exposed to a hazard, then the impact on people for that hazard is high. If 25% to 49% of your population is exposed to a hazard, then the impact is considered to be medium, and the impact is low if 25% or less of the population is exposed to the hazard. No impact would mean that there is no exposure to a hazard.

For impact on property, the values represent the value of the property exposed to a hazard in comparison to the total assessed value of property within your community. For the purposes of this exercise, a building has been defined as: "an improvement to real property that has 4 walls, a roof, and a replacement cost value of $1000 or more. For example, if the exposure of property is 50% or more of the total assessed property value for your community, the impact on property is high. If the vulnerability of property is between 15% and 49% of the total assessed property value for your community, the impact on property is medium, and if the vulnerability is 14% or less of the total assessed property value for your community, the impact on property is low. No impact would mean that that there is no exposure to the hazard or that the impact of the hazard typically will not cause damage to property. For example, droughts do not damage buildings; therefore they have no impact on buildings.

For the economic impact, the values represent estimates of what the loss would be from a major event of each hazard. Once again, this is a comparison with the total assessed property value for your community. It should be noted that for some of the hazards such as wildfire, landslide and severe weather, vulnerability was considered to be the same as exposure due to the lack of loss estimation tools specific to those hazards. Loss estimations were generated for the earthquake, flood and tsunami hazards using the HAZUS-MH, loss estimation tool. For example, if the loss potential of property is 25% or more of the total assessed property value for your community, the impact on property is high. If the loss potential of property is between 10% and 24% of the total assessed property value for your community, the impact on property is medium, and if the loss potential is 9% or less of the total assessed property value for your community, the impact on property is low. No impact would mean that there is no exposure to the hazard, or that that the occurrence of the hazard would not cause measurable damages to improved property.

A numerical value has been assigned for impact based on the following definitions:

- High Impact (numerical value = 3)
- Medium Impact (numerical value = 2)
- Low Impact (numerical value = 1)
- No impact (numerical value = 0)

TABLE 2.
HAZARD IMPACT ON PEOPLE

Hazard Event	Impact	Numerical Value	Multiplied by weighted value of 3
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

TABLE 3.
HAZARD IMPACT ON PROPERTY

Hazard Event	Impact	Numerical Value	Multiplied by weighted value of 2
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

TABLE 4.
HAZARD IMPACT ON ECONOMY

Hazard Event	Impact	Numerical Value	Multiplied by weighted value of 1
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

RISK RANKING

The risk ranking for each hazard is determined by multiplying the assigned numerical value for probability by the sum of the weighted numerical values of impact on people; property and economy (see Table 5). The following equation shows the risk rating calculation:

Risk Rating = Probability X Impact (people + property + economy)

TABLE 5.
RISK RATING

Hazard Event	Probability	Impact	Total= (Probability x Impact)
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

Once Table 5 has been completed above, complete the table under section D of your template. Please be advised that it is not the intent of this exercise to eliminate subjectivity based on your knowledge of the history of natural hazard events within your jurisdiction. If this risk ranking exercise generates results other that what you know based on substantiated data and documentation, you may alter this 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 your 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.

E.) Capability Assessment

1.) Legal and regulatory capability

Describe the legal authorities available to your community and/or enabling legislation at the state level affecting all types of planning and land management tools that can support hazard mitigation initiatives. Complete the table as indicated. Which of these regulatory tools does your community have available. If you do not have the regulatory tool as described, indicate as such. This may help you identify an initiative.

For the purposes of this section, "prohibitions" and "higher jurisdictional authority" are defined as follows:

Prohibitions: Are there any regulations or laws that may prohibit an initiative you have selected. Examples would be: floodway regulations, Endangered Species Act or Clean Water act regulations, etc.

Higher Regulatory Authority: Are there regulations that may impact your initiative that are enforced or administered by another agency. For example; a state agency, special purpose district.

Under the comments section, please site the code or ordinance # and its data of adoption.

2.) Administrative and Technical Capability

This section requires you to take inventory of the staff/personnel resources available to your community to help your community in hazard mitigation planning and implementation of specific mitigation actions. This information can be utilized in the preparation of the mitigation strategy for your community

3.) Financial Resources

Identify what financial resources are available to your community to aid you in the implementation of possible mitigation initiatives. The Hazard Mitigation Grant Program and the Pre-disaster mitigation grant program are not listed here since it is assumed that the grant programs will be pursued since this plan is a prerequisite for these programs. "Accessible" means this is a resource that is accessible to your community, or there are limitations or prerequisites that may hinder your eligibility for this resource.

4.) Community Mitigation Related Classifications

The classification listed in table E.4 are related to your community's effectiveness in providing services that may impact your vulnerability to the natural hazards identified. If your community does not participate in a program, indicate N/A in the appropriate field. Access to the various classifications will be provided through technical assistance.

F.) Hazard Mitigation Action Plan:

Complete the table to include those initiatives your community would like to pursue with this plan. Some important points to remember when completing this section:

> Know what is, and is not grant eligible under the Hazard Mitigation Grant Program (HMGP) and Pre-disaster Mitigation Grant Program (PDM). (*See attachment "B"*). It is key to remember, that listing HMGP or PDM as a potential funding source for an ineligible project will be a huge red flag once this plan goes through review.
>
> Know the overall goals, objectives and guiding principles of the Humboldt County Natural Hazard Mitigation Plan.
>
> Identify projects where the benefits will exceed the costs. (see section G).
>
> Include any project that your community has committed to pursuing regardless of grant eligibility.
>
> Refer to the ***Mitigation Catalog*** for mitigation options you might want to consider that are hazard specific and consistent with the goals and objectives of the plan.

A lot of detail is not needed in the description of the initiative. This will come when you apply for the project grant. Provide enough information to identify the project's scope and impact. For example:

> Address NFIP identified Repetitive Loss properties. Through targeted mitigation, acquire, relocate or retrofit the 5 repetitive loss structures within Anytown as funding opportunities become available.
>
> Non-structural, seismic retrofit of Arcata City Hall.
>
> Floodplain Property acquisition in Freylands subdivision.
>
> Assess and enhance the County flood warning capability by joining the NOAA "Storm Ready" program.

Also, 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. Also, a hazard specific project ***is not*** required for each hazard you have ranked in order to be eligible for an HMGP project grant after a "declared" disaster. In other words, if you have not identified an earthquake related project, and an earthquake occurs that causes damage within your community, you are not discounted from HMGP project grant eligibility. The key here is to identify at least 1 initiative for your highest ranked risk.

Identify the hazard(s) the initiative will mitigate and illustrate who will be the lead in administering the project. This will most likely be your governing board. Identify funding source(s) for project. If it is a grant, include the funding source(s) for the cost share. Refer to your 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. Identify by number the Humboldt County Natural Hazard Mitigation plan objective(s) the project will meet. There is no need to list the goals since we made sure that our objectives would meet all goals through the selection process. These have been provided in the Steering Committee meeting minutes that were forwarded to you in the past. Technical assistance will be available to your community in completing this section during the technical assistance visit.

G.) Prioritization of Mitigation Initiatives

Complete the information in table G. The purpose of this exercise is to prioritize your initiatives in a matter such that meets the requirements of section 201.6 of 44CFR. A brief description of each category is a s follows:

- Initiative #: indicate the number of the initiative from Table F.
- # of Objectives met: How many objectives will the initiative meet?
- Benefits: Enter high, medium or low as defined below.
- Costs: Enter high medium or low as defined below. 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 an anecdotal assessment. For example, a high benefit over a medium cost would = yes.
- Is the project grant eligible?: Refer to attachment A.
- Can Project be funded under existing program budgets?: 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: List the initiative priority as high, medium or low as defined below.

Benefit/Cost Review

This is not intended to be a detailed benefit/cost analysis that is required of HMGP/PDM project grants. This is a "review" to determine that the initiatives you have identified meet one of the primary objectives of the Disaster Mitigation Act. What this exercise hopes to achieve is to identify projects where the probable benefits ***will not*** exceed the probable costs of this project. When performing an anecdotal B/C review, use the following parameters to define the benefits and costs of a proposed project as high, medium or low.

COSTS

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 part of, or can be part of an existing ongoing program.

BENEFITS

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.

In using this approach, projects that result in positive benefits versus costs categorical ratios (i.e., high over high, high over medium, medium over low, etc.), will be considered cost beneficial and should be prioritized accordingly.

Prioritize you projects as "high," "medium" or "low" priorities as defined below.

Remember, it is not the intent of this exercise to be overly technical. It is a "review" exercise meant to provide additional information in identifying and prioritizing mitigation initiatives.

Explanation of priorities

- **High Priority**: A project that meets multiple plan objectives, benefits exceeds cost, has funding secured under existing programs or authorizations, or is grant eligible, and can be completed in 1 to 5 years (i.e., short term project) once project is funded.
- **Medium Priority**: A project that meets at least 1 plan objective, benefits exceeds costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded.
- **Low Priority**: Any project that 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 considered long term (5 to 10 years).

H.) Future needs to better understand risk/vulnerability

In this section, identify any future studies, analyses, reports, or surveys your community 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 District.

I.) Additional comments:

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

Attachment "A"

Hazard Mitigation Grant Program (HMGP)
Pre-Disaster Mitigation Grant Program (PDM)

FACT SHEET

I. HAZARD MITIGATION GRANT PROGRAM (HMGP)

What is the Hazard Mitigation Grant Program?

Authorized under Section 404 of the Stafford Act, the Hazard Mitigation Grant Program (HMGP) administered by the Federal Emergency Management Agency (FEMA) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Who is eligible to apply?

Hazard Mitigation Grant Program funding is only available to applicants that reside within a Presidentially declared disaster area. Eligible applicants are

- State and local governments
- Indian tribes or other tribal organizations
- Certain non-profit organizations

What types of projects can be funded by the HMGP?

HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. Examples of projects include, but are not limited to:

- Acquisition of real property for willing sellers and demolition or relocation of buildings to convert the property to open space use
- Retrofitting structures and facilities to minimize damages from high winds, earthquake, flood, wildfire, or other natural hazards
- Elevation of flood prone structures
- Development and initial implementation of vegetative management programs
- Minor flood control projects that do not duplicate the flood prevention activities of other Federal agencies
- Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities
- Post-disaster building code related activities that support building code officials during the reconstruction process

What are the minimum project criteria?

There are five issues you must consider when determining the eligibility of a proposed project.

- Does your project conform to your State's Hazard Mitigation Plan?
- Does your project provide a beneficial impact on the disaster area? i.e. the State
- Does your application meet the environmental requirements?
- Does your project solve a problem independently?
- Is your project cost-effective?

II. PRE-DISASTER MITIGATION GRANT PROGRAM (PDM)

What is the Pre-Disaster Mitigation competitive grant program?

The Pre-Disaster Mitigation (PDM) competitive grant program provides funds to State, Tribal, and local governments for pre-disaster mitigation planning and projects primarily addressing natural hazards. Cost-Effective pre-disaster mitigation activities reduce risk to life and property from natural hazard events before a natural disaster strikes, thus reducing overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. Funds will be awarded on a competitive basis to successful Applicants for mitigation planning and project applications intended to make local governments more resistant to the pacts of future natural disasters.

Who can apply for a PDM competitive grant?

Eligible PDM competitive grant Applicants include State and Territorial emergency management agencies, or a similar office of the State, District of Columbia, U.S. Virgin Islands, Commonwealth of Puerto Rico, Guam, American Samoa, Commonwealth of the Northern Mariana Islands, and Federally-recognized Indian Tribal governments.

Eligible Sub-applicants include State agencies; Federally-recognized Indian Tribal governments; and local governments (including State recognized Indian Tribal governments and Alaska native villages).

Applicants can apply for PDM competitive grant funds directly to FEMA, while Sub-applicants must apply for funds through an eligible Applicant.

Private non-profit organizations are not eligible to apply for PDM but may ask the appropriate local government to submit an application for the proposed activity on their behalf.

What are eligible PDM projects?

Multi-hazard mitigation projects must primarily focus on natural hazards but also may address hazards caused by non-natural forces. **Funding is restricted to a maximum of $3M Federal share per project.** The following are eligible mitigation projects:

Acquisition or relocation of hazard-prone property for conversion to open space in perpetuity;

Structural and non-structural retrofitting of existing buildings and facilities (including designs and feasibility studies when included as part of the construction project) for wildfire, seismic, wind or flood hazards (e.g., elevation, flood proofing, storm shutters, hurricane clips);

Minor structural hazard control or protection projects that may include vegetation management, Stormwater management (e.g., culverts, floodgates, retention basins), or shoreline/landslide stabilization; and,

Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities and that do not constitute a section of a larger flood control system.

Mitigation Project Requirements

Projects should be technically feasible (see Section XII. Engineering Feasibility) and ready to implement. Engineering designs for projects must be included in the application to allow FEMA to assess the effectiveness and feasibility of the proposed project. The project cost estimate should complement the engineering design, including all anticipated costs. FEMA has several formats that it uses in cost estimating for projects. Additionally, other Federal agencies' approaches to project cost estimating can be used as long as the method provides for a complete and accurate estimate. FEMA can provide technical assistance on engineering documentation and cost estimation (see Section XIII.D. Engineering Feasibility).

Mitigation projects also must meet the following criteria:

1. Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster, consistent with 44 CFR 206.434(c)(5) and related guidance, and have a Benefit-Cost Analysis that results in a benefit-cost ratio of 1.0 or greater (see Section X. Benefit-Cost Analysis). **Mitigation projects with a benefit-cost ratio less than 1.0 will not be considered for the PDM competitive grant program**;

2. Be in conformance with the current FEMA-approved State hazard mitigation plan;

3. Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed, consistent with 44 CFR 206.434(b)(4);

4. Be in conformance with 44 CFR Part 9, Floodplain Management and Protection of Wetlands, and 44 CFR Part 10, consistent with 44 CFR 206.434(c)(3);

5. Not duplicate benefits available from another source for the same purpose, including assistance that another Federal agency or program has the primary authority to provide (see Section VII.C. Duplication of Benefits and Programs);

6. Be located in a community that is participating in the NFIP if they have been identified through the NFIP as having a Special Flood Hazard Area (a FHBM or FIRM has been issued). In addition, the community must not be on probation, suspended or withdrawn from the NFIP; and,

7. Meet the requirements of Federal, State, and local laws.

What are examples of Ineligible PDM Projects?

The following mitigation projects are ***not*** eligible for the PDM program:

Major flood control projects such as dikes, levees, floodwalls, seawalls, groins, jetties, dams, waterway channelization, beach nourishment or re-nourishment;

Warning systems;

Engineering designs that are not integral to a proposed project;

Feasibility studies that are not integral to a proposed project;

Drainage studies that are not integral to a proposed project;

Generators that are not integral to a proposed project;

Phased or partial projects;

Flood studies or flood mapping; and,

Response and communication equipment.

Partner Special Purpose District Template

(Insert District name)

A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	**Alternate Point of Contact**
Name: Title: Mailing Address: Telephone #: E-mail Address	Name: Title: Mailing Address: Telephone #: E-mail Address

B.) DISTRICT PROFILE

(Insert text profile of District as described in instructions)

1) **Land Area Served**
2) **Population Served**
3) **Land Area Owned**
4) **List of Critical Infrastructure/Equipment**
5) **Value of Critical Infrastructure/Equipment**
6) **List of Critical Facilities (owned by District)**
7) **Value of Critical Facilities**
8) **Value of Area Served**

C.) OUTLINE OF AREA SERVED

See map in Chapter 1.

D.) CURRENT AND ANTICIPATED SERVICE TRENDS

E.) NATURAL HAZARD EVENT HISTORY SPECIFIC TO THE DISTRICT SERVICE AREA

NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment

F.) NATURAL HAZARD RISK RANKING

NATURAL HAZARD RISK RANKING			
Rank #	Hazard type	Estimate of potential dollar losses to District-owned facilities exposed to the hazard	Probability of Occurrence[a]
1			
2			
3			
4			
5			

a. High - Hazard event is likely to occur within 25 years; Medium – Hazard event is likely to occur within 100 years; Low – Hazard event in not likely to occur within 100 years

G.) EXISTING APPLICABLE HAZARD MITIGATION CODES, ORDINANCES OR POLICIES

H.) EXISTING APPLICABLE NATURAL HAZARDS MITIGATION ASSOCIATED PLANS AND/OR DOCUMENTS

I.) DISTRICT MITIGATION RELATED CLASSIFICATIONS

DISTRICT CLASSIFICATIONS		
Program	Classification	Date Classified
Public Protection		
Storm Ready		
Firewise		
Tsunami Ready		

J.) HAZARD MITIGATION ACTION PLAN

HAZARD MITIGATION ACTION PLAN MATRIX							
Initiative	Mitigation Initiative	Hazard(s) Mitigated	Objectives Met	Lead Agency	Estimated Cost	Possible Funding Sources or Resources	Timeline[a]

a. "Short term" = 1 to 5 years; "Long Term"= 5 years or greater, "OG" = Ongoing program

K.) PRIORITIZATION OF MITIGATION INITIATIVES

PRIORITIZATION OF MITIGATION INITIATIVES							
Initiative #	# of Objectives met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)

Explanation of priorities

- **High Priority**: A project that meets multiple plan objectives, benefits exceeds cost, has funding secured under existing programs or authorizations, or is grant eligible, and can be completed in 1 to 5 years (i.e., short term project) once project is funded.
- **Medium Priority**: A project that meets at least 1 plan objective, benefits exceeds costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded.
- **Low Priority**: Any project that 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 considered long term (5 to 10 years).

L.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

M.) ADDITIONAL COMMENTS

SPECIAL PURPOSE DISTRICT TEMPLATE

Instructions for completion

The following are instructions for the completion of the Special Purpose District annex template that will need to be completed for each partner City and the County in the Humboldt County Natural Hazards Mitigation plan. The purpose of these instructions is to guide each Partner in the preparation of the information required for Disaster Mitigation Act (DMA) compliance. Each Partner should try to complete as much of the information as possible. Technical assistance will be available to each planning partner in the form of a workshop and/or a technical assistance visit with each partner depending on funding availability. Each planning partner should have completed the following prior to completion of this template:

Reviewed the draft Risk Assessment for Humboldt County.

Reviewed the Results from the Hazard Mitigation Plan Questionnaire.

Review of the catalog of mitigation alternatives.

Any questions on what is required or how to complete this document should be directed to:

Rob Flaner, CFM

Tetra Tech Inc.

90 South Blackwood Ave.

Eagle, ID 83616

(208) 939-4391

e-mail: rflaner@msn.com

This template has been set up as a word document in a format that will be used in the final plan. Each Partner is asked to use this template with no other derivations or versions so that a uniform product will be completed for each partner. Please provide both a hard copy and digital copy of the completed template to Tetra Tech upon completion. If a Partner does not have "Word" capability, prepare the document in whatever format you do have and the planning team will convert it to the Word format.

Instructions:

Title Block: In the Title box, type in the complete official name of your Jurisdiction (i.e., Humboldt County Fire District #1, Willow Creek Community Services District, Humboldt Bay Municipal Water District, etc.). At this time, also change the name in the "header" box to coincide with this title.

A.) Hazard Mitigation Plan Point of Contact

Please provide the name, title, mailing address, telephone number, fax number and e-mail address for the primary point of contact for your district for this plan. This person would be that person responsible for monitoring, evaluating and updating the annex for your District as outlined in this plan. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing the development of this plan. In addition, designate an alternate point of contact. This would be the person to contact should the primary point of contact is not available, or no longer employed by the District.

B.) District Profile:

Please provide a brief summary to profile your district. Include purpose of the district, date of inception, organization, number of employees, mode of operation (i.e., how operations are funded), who/what is the governing body of the district and who has adoptive authority. Also include who are your customers (if applicable, include #'s of users or subscribers). Include a geographical description of your service area.

B.1) Land Area served/owned:

In these 2 boxes enter the total acreage or square miles of all land owned by your District, and the area served by your District.

B.2) Population Served

In this section list the estimated population that your district provides services to. If you do not know this number directly, you can create estimate (i.e.; number of service connections times the average household size for Humboldt County based on Census data)

B.2) List of Critical Infrastructure/equipment:

List all infrastructure/equipment that is critical to your Districts operations and/or you have identified to be housed or located in a natural hazard risk zone. Examples are as follows:

Fire Districts: Apparatus, equipment (note: we do not need a detailed inventory of each engine, truck and there contents. A simple statement like 5 Engines, 2 ladders, and their contents will suffice) that is housed in a facility located in an identified natural hazard risk zone. This is the equipment that is essential for you to deliver services to this area should a natural hazard occur. Do not consider reserve equipment.

Dike/Flood Control Districts: Miles of levees, pump stations, R/D ponds, tide gates, miles of ditches, etc., within identified natural hazard risk zones.

Water Districts: Miles of pipe (does not need to be broken down into size and type), pump stations, treatment facilities and most importantly dams and reservoirs, within identified natural hazard risk zones.

Public Utility Districts: Miles of power line (above ground and under ground), generators, power generating sub-stations, miles of pipeline, etc., within identified natural hazard risk zones.

School Districts: Include anything (besides school buildings) that is critical for you to operate (i.e., school buses if you own a fleet of school buses) within identified natural hazard risk zones.

B.3) Value of Critical Infrastructure/Equipment:

This should be a single dollar amount representing the total "replacement cost" value of the infrastructure/equipment listed in B.2.

B.4) List of Critical Facilities:

This is a list of buildings and other critical facilities that are critical to your districts operations and/or you have identified to be located in a risk zone.

B.5 Value of Critical Facilities:

This is the replacement cost value of the buildings/facilities listed in B.4.

B.6 Value of Area Served:

What is the *approximate* County assessed value of your service area. Basically this would be the property value of your constituency. If you do not have this information, the County should be able to provide a number using their assessor's database.

C.) Outline of your service area:

The County will attempt to create maps that will illustrate the service area boundary for all of the special District partners. This most likely will be multiple maps segregated based on district type (i.e., fire districts, water districts, school districts, etc.). These maps will be provided at the workshop. Please confirm that the boundaries reflected on the maps are current and accurate for your district. In the box for this section, include reference to the map that includes your district's boundaries.

D.) Current and Anticipated Service Trends:

A brief description on how your Districts services are projected to expand in the foreseeable future. Also include in this section reference to any identified capital improvement needs identified to meet this projected expansion. Include in the description the probable cause for the expanded services. For example:

Portions of the district have experienced a 13 percent growth over the last 5 years and land use regulations based on GMA project an increase in light commercial and residential land uses within the district service area.

(For a Fire District) *This increase in density of land uses 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) *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) *This increase in density of land use will represent and increase in the number of housing units within the service area and thus represent an expansion of the districts delivery network.*

E.) Natural Hazard Event History:

List in chronological order (most recent first) any natural hazard event that has occurred since 1975 that caused damage to your district and/or service area. Include the date of the event and the estimated dollar amount of damage it caused. Please refer to the summary of natural hazard events within Humboldt County included in the risk assessment.

F.) Natural Hazard Risk/Vulnerability Risk Ranking:

Under this step, a ranking of risk will be performed as it pertains to your District. A county –wide risk ranking has been performed for the entire planning area and is contained in the risk assessment chapter of volume 1 of the plan. However, each planning partner will have differing degrees of risk exposure and vulnerability aside from the whole, and therefore will need to rank the degree of risk to each hazard as it pertains to them. This will allow for the appropriate selection and prioritization of initiatives that will reduce the highest levels of risk for each planning partner. The exact same methodology that will be applied to the county-wide risk ranking will be applied to each planning partner. This will assure consistency in the overall ranking of risk.

This risk ranking exercise serves two purposes: To describe the probability of occurrence for each hazard and to describe the impact each would have on the people, property and operability of the special purpose districts within Humboldt County. Estimates of risk for Humboldt County were developed using methodologies promoted by FEMA's hazard mitigation planning guidance and generated by FEMA's HAZUS-MH risk assessment tool.

PROBABILITY OF OCCURRENCE

The probability of occurrence of a hazard event provides an estimation of how often the event occurs. This is generally based on the past hazard events that have occurred in the area and the forecast of the event occurring in the future. This is done by assigning a probability factor, which is based on yearly values of occurrence. The numerical value assigned to each category will be used to determine the risk rating of each hazard. Table 1 lists the probability of occurrence for each hazard as it pertains to your district. This would be the occurrence of an event that caused property damage within your jurisdiction. These values were assigned by high, medium and low occurrence:

- High—Hazard event is likely to occur within 25 years **(Numerical value 3)**
- Medium—Hazard event is likely to occur within 100 years **(Numerical value 2)**
- Low—Hazard event is not likely to occur within 100 years **(Numerical value 1)**

For example: If your service area has experienced 2 damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your service area has experienced no damages from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category.

TABLE 1.
PROBABILITY OF HAZARDS

Hazard Event	Probability	Numerical Value
Drought		
Earthquake		
Fish Losses		
Flood		
Landslide		
Severe Weather		
Tsunami		
Wild Fire		

IMPACT

The impact of each hazard was divided into three categories: impacts on people, property or the operability of your District. Tables 2, 3 and 4 summarize the identified impacts for each hazard. These categories were also assigned weighted values. Impact on people was given a weighted factor of 3, impact on property was given a weight of 2 and impact on operability was given a weighted factor of 1.

For impact of people, the values were assigned based on the percentage of the total population of your service area that may be directly impacted by a hazard event. For example, if 50% or more of your service area population is exposed to a hazard, then the impact on people for that hazard is high. If 25% to 49% of your service area population is exposed to a hazard, then the impact is considered to be medium, and the impact is low if 25% or less of the service area population is exposed to the hazard.

For impact on property, the values represent the value of your buildings, equipment and infrastructure (critical facilities) that is exposed to a hazard in comparison to the total assessed value of that property. This component is strictly looking at exposure, and not taking into account vulnerability. The assumption here is that being exposed will result in a degree of functional downtime. For example, if the exposure of critical facilities is 50% or more of the total assessed property value for all of your facilities, the impact on property is high (i.e.: 50% of your buildings lie within a designated floodplain). If the exposure of critical facilities is between 25% and 49% of the total assessed value all your facilities, the impact on property is medium, and if the exposure is 24% or less of the total assessed value of all your facilities, the impact on property is low.

For the operability impact, the values represent estimates of how long it will take your district to become 100% operable after the occurrence of an event for which you have exposure. The assumption here is that facilities owned and operated by your district have been defined and identified as critical facilities by the Steering Committee. The estimated functional downtime for critical facilities has been estimated for most hazards within the planning area. This impact looks at the number of days it may take to re-establish

100% operability after an event. Note, if your district has no exposure to a hazard, then there would be no impact on operability. The flowing thresholds have been established to rank the impact on operability:

- High = functional downtime of 365 days or more.
- Medium = Functional downtime of 180 to 364 days.
- Low = Functional downtime of 180 days or less

You will need to consult the risk assessment for this task. The critical facilities exposed to each hazard have been identified, and the impacts on operability have been estimated for most of the hazards within the planning area. ***(Note: if the functional downtime component has not been provided for a hazard in the risk assessment, consider the impact on operability of that hazard to be low).***

A numerical value has been assigned for impact based on the following definitions:

- High Impact (numerical value = 3)
- Medium Impact (numerical value = 2)
- Low Impact (Numerical value = 1)

TABLE 2.
HAZARD IMPACT ON PEOPLE

Hazard Event	Impact	Numerical Value	Multiplied by weighted value of 3
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

TABLE 3.
HAZARD IMPACT ON PROPERTY

Hazard Event	Impact	Numerical Value	Multiplied by weighted value of 2
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

TABLE 4.
HAZARD IMPACT ON OPERABILITY

Hazard Event	Impact	Numerical Value	Multiplied by weighted value of 1
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

RISK RANKING

The risk ranking for each hazard is determined by multiplying the assigned numerical value for probability by the sum of the weighted numerical values of impact on people; property and operability (see Table 5). The following equation shows the risk rating calculation:

Risk Rating = Probability x Impact (people + property + economy)

TABLE 5.
RISK RATING

Hazard Event	Probability	Impact	Total= (Probability x Impact)
Drought			
Earthquake			
Fish Losses			
Flood			
Landslide			
Severe Weather			
Tsunami			
Wild Fire			

Once table 5 has been completed above, complete the table under section F of your template. Please be advised that it is not the intent of this exercise to eliminate subjectivity based on your knowledge of the history of natural hazard events within your jurisdiction. If this risk ranking exercise generates results other that what you know based on substantiated data and documentation, you may alter this 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 your 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.

G.) Existing Applicable Hazard Mitigation Laws, Ordinances, and Codes

List any federal, state, local or district laws, ordinances, codes and policies that govern your district that include elements addressing hazard mitigation. Describe how these laws may support or conflict with the mitigation strategies of this plan. None applicable is a possible answer for this section.

H.) Existing Applicable Hazard Mitigation associated plans/studies/documents

List any other plans, studies or other documents that address hazard mitigation issues for your district. Note whether the documents could have a positive or a negative impact on the mitigation strategies of this plan. None applicable is a possible answer for this section.

I.) District Mitigation Related Classifications:

The classifications listed in table E.4 are related to your community's effectiveness in providing services that may impact your vulnerability to the natural hazards identified. If your community does not participate in a program, indicate N/A in the appropriate field. Access to the various classifications will be provided through technical assistance.

J.) Hazard Mitigation Action Plan:

Complete the table to include those initiatives your community would like to pursue with this plan. Some important points to remember when completing this section:

> Know what is, and is not grant eligible under the Hazard Mitigation Grant Program (HMGP) and Pre-disaster Mitigation Grant Program (PDM). (*See attachment "A"*)
>
> Know the overall goals, objectives and guiding principles of the Humboldt County Natural Hazard Mitigation Plan.
>
> Identify projects where the benefits will exceed the costs. (See Table G).
>
> Include any project that your community has committed to pursuing regardless of grant eligibility.
>
> Refer to the ***Mitigation Catalog*** for mitigation options you might want to consider that are hazard specific and consistent with the goals and objectives of the plan.

A lot of detail is not needed in the description of the initiative. This will come when you apply for the project grant. Provide enough information to identify the project's scope and impact. For example:

> Address NFIP identified Repetitive Loss properties. Through targeted mitigation, acquire, relocate or retrofit the 5 repetitive loss structures within Anytown as funding opportunities become available.
>
> Seismic retrofit of Sultan City Hall.
>
> Floodplain Property acquisition in Freylands subdivision.
>
> Assess and enhance the County flood warning capability by joining the NOAA "Storm Ready" program.

Also, 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. Also, a hazard specific project ***is not*** required for each hazard you have ranked in order to be eligible for an HMGP project grant after a "declared" disaster. In other words, if you have not identified an earthquake related project, and an earthquake occurs that causes damage within your community, you are not discounted from HMGP project grant eligibility. The key here is to identify at least 1 initiative for your highest ranked risk.

Identify the hazard(s) the initiative will mitigate and illustrate who will be the lead in administering the project. This will most likely be your governing board. Identify funding source(s) for project. If it is a grant, include the funding source(s) for the cost share. Refer to your 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. Identify by number the Humboldt County Natural Hazard Mitigation plan goal(s) and objective(s) the project will meet. These have been provided in the Steering Committee meeting minutes that were forwarded to you in the past. Technical assistance will be available to your community in completing this section during the technical assistance visit.

K.) Prioritization of Mitigation Initiatives

Complete the information in table G. The purpose of this exercise is to prioritize your initiatives in a matter such that meets the requirements of section 201.6 of 44CFR. A brief description of each category is as follows:

- Initiative #: indicate the number of the initiative from Table F.
- # of Objectives met: How many objectives will the initiative meet?
- Benefits: Enter high, medium or low as defined below.
- Costs: Enter high medium or low as defined below. 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 an anecdotal assessment. For example, a high benefit over a medium cost would = yes.
- Is the project grant eligible? Refer to attachment A.
- Can Project be funded under existing program budgets? 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: List the initiative priority as high, medium or low as defined below.

Benefit/Cost Review

This is not intended to be a detailed benefit/cost analysis that is required of HMGP/PDM project grants. This is a "review" to determine that the initiatives you have identified meet one of the primary objectives of the Disaster Mitigation Act. What this exercise hopes to achieve is to identify projects where the probable benefits ***will not*** exceed the probable costs of this project. When performing an anecdotal B/C review, use the following parameters to define the benefits and costs of a proposed project as high, medium or low.

Costs

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 part of, or can be part of an existing ongoing program.

Benefits

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.

In using this approach, projects that result in positive benefits versus costs categorical ratios (i.e., high over high, high over medium, medium over low, etc.), will be considered cost beneficial and should be prioritized accordingly.

Prioritize you projects as "high," "medium" or "low" priorities as defined below.

Remember, it is not the intent of this exercise to be overly technical. It is a "review" exercise meant to provide additional information in identifying and prioritizing mitigation initiatives.

Explanation of priorities

- **High Priority**: A project that meets multiple plan objectives, benefits exceeds cost, has funding secured under existing programs or authorizations, or is grant eligible, and can be completed in 1 to 5 years (i.e., short term project) once project is funded.

- **Medium Priority**: A project that meets at least 1 plan objective, benefits exceeds costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded.

- **Low Priority**: Any project that 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 considered long term (5 to 10 years).

L.) Future needs to better understand risk/vulnerability

In this section, identify any future studies, analyses, reports, or surveys your community 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 District.

M.) Additional comments:

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

Attachment "A"

Hazard Mitigation Grant Program (HMGP)
Pre-Disaster Mitigation Grant Program (PDM)

FACT SHEET

III. HAZARD MITIGATION GRANT PROGRAM (HMGP)

What is the Hazard Mitigation Grant Program?

Authorized under Section 404 of the Stafford Act, the Hazard Mitigation Grant Program (HMGP) administered by the Federal Emergency Management Agency (FEMA) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Who is eligible to apply?

Hazard Mitigation Grant Program funding is only available to applicants that reside within a presidentially declared disaster area. Eligible applicants are

- State and local governments
- Indian tribes or other tribal organizations
- Certain non-profit organizations

What types of projects can be funded by the HMGP?

HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. Examples of projects include, but are not limited to:

- Acquisition of real property for willing sellers and demolition or relocation of buildings to convert the property to open space use
- Retrofitting structures and facilities to minimize damages from high winds, earthquake, flood, wildfire, or other natural hazards
- Elevation of flood prone structures
- Development and initial implementation of vegetative management programs
- Minor flood control projects that do not duplicate the flood prevention activities of other Federal agencies
- Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities
- Post-disaster building code related activities that support building code officials during the reconstruction process

What are the minimum project criteria?

There are five issues you must consider when determining the eligibility of a proposed project.

- Does your project conform to your State's Hazard Mitigation Plan?
- Does your project provide a beneficial impact on the disaster area? i.e. the State
- Does your application meet the environmental requirements?
- Does your project solve a problem independently?
- Is your project cost-effective?

IV. PRE-DISASTER MITIGATION GRANT PROGRAM (PDM)

What is the Pre-Disaster Mitigation competitive grant program?

The Pre-Disaster Mitigation (PDM) competitive grant program provides funds to State, Tribal, and local governments for pre-disaster mitigation planning and projects primarily addressing natural hazards. Cost-Effective pre-disaster mitigation activities reduce risk to life and property from natural hazard events before a natural disaster strikes, thus reducing overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. Funds will be awarded on a competitive basis to successful Applicants for mitigation planning and project applications intended to make local governments more resistant to the pacts of future natural disasters.

Who can apply for a PDM competitive grant?

Eligible PDM competitive grant Applicants include State and Territorial emergency management agencies, or a similar office of the State, District of Columbia, U.S. Virgin Islands, Commonwealth of Puerto Rico, Guam, American Samoa, Commonwealth of the Northern Mariana Islands, and Federally-recognized Indian Tribal governments.

Eligible Sub-applicants include State agencies; Federally-recognized Indian Tribal governments; and local governments (including State recognized Indian Tribal governments and Alaska native villages).

Applicants can apply for PDM competitive grant funds directly to FEMA, while Sub-applicants must apply for funds through an eligible Applicant.

Private non-profit organizations are not eligible to apply for PDM but may ask the appropriate local government to submit an application for the proposed activity on their behalf.

What are eligible PDM projects?

Multi-hazard mitigation projects must primarily focus on natural hazards but also may address hazards caused by non-natural forces. **Funding is restricted to a maximum of $3M Federal share per project.** The following are eligible mitigation projects:

Acquisition or relocation of hazard-prone property for conversion to open space in perpetuity;

Structural and non-structural retrofitting of existing buildings and facilities (including designs and feasibility studies when included as part of the construction project) for wildfire, seismic, wind or flood hazards (e.g., elevation, flood proofing, storm shutters, hurricane clips);

Minor structural hazard control or protection projects that may include vegetation management, Stormwater management (e.g., culverts, floodgates, retention basins), or shoreline/landslide stabilization; and,

Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities and that do not constitute a section of a larger flood control system.

Mitigation Project Requirements

Projects should be technically feasible (see Section XII. Engineering Feasibility) and ready to implement. Engineering designs for projects must be included in the application to allow FEMA to assess the effectiveness and feasibility of the proposed project. The project cost estimate should complement the engineering design, including all anticipated costs. FEMA has several formats that it uses in cost estimating for projects. Additionally, other Federal agencies' approaches to project cost estimating can be used as long as the method provides for a complete and accurate estimate. FEMA can provide technical assistance on engineering documentation and cost estimation (see Section XIII.D. Engineering Feasibility).

Mitigation projects also must meet the following criteria:

8. Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster, consistent with 44 CFR 206.434(c)(5) and related guidance, and have a Benefit-Cost Analysis that results in a benefit-cost ratio of 1.0 or greater (see Section X. Benefit-Cost Analysis). **Mitigation projects with a benefit-cost ratio less than 1.0 will not be considered for the PDM competitive grant program**;

9. Be in conformance with the current FEMA-approved State hazard mitigation plan;

10. Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed, consistent with 44 CFR 206.434(b)(4);

11. Be in conformance with 44 CFR Part 9, Floodplain Management and Protection of Wetlands, and 44 CFR Part 10, consistent with 44 CFR 206.434(c)(3);

12. Not duplicate benefits available from another source for the same purpose, including assistance that another Federal agency or program has the primary authority to provide (see Section VII.C. Duplication of Benefits and Programs);

13. Be located in a community that is participating in the NFIP if they have been identified through the NFIP as having a Special Flood Hazard Area (a FHBM or FIRM has been issued). In addition, the community must not be on probation, suspended or withdrawn from the NFIP; and,

14. Meet the requirements of Federal, State, and local laws.

What are examples of Ineligible PDM Projects?

The following mitigation projects are ***not*** eligible for the PDM program:

Major flood control projects such as dikes, levees, floodwalls, seawalls, groins, jetties, dams, waterway channelization, beach nourishment or re-nourishment;
Warning systems;
Engineering designs that are not integral to a proposed project;
Feasibility studies that are not integral to a proposed project;
Drainage studies that are not integral to a proposed project;
Generators that are not integral to a proposed project;
Phased or partial projects;
Flood studies or flood mapping; and,
Response and communication equipment

APPENDIX B.
LINKAGE PROCEDURES

ADMINISTRATIVE PROCESS FOR "LINKAGE" TO THE HUMBOLDT OPERATIONAL AREA HAZARD MITIGATION PLAN

Even though the initial development of the Humboldt Operational Area Hazard Mitigation Plan (HOAHMP) included 26 planning partners, not all eligible local governments within the defined planning area are included in this plan. It is assumed that some or all of these non-participating local governments may chose to "link" to the HOAHMP at some point in time to gain eligibility for programs under the DMA. In addition, some of the current partnership may not continue to meet eligibility requirements due to the lack of active participation as prescribed by the plan. These "linkage" procedures will define the requirements established by the HOAHMP Steering Committee and all planning partners for dealing with the increase or decrease in 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 44CFR.

Increasing the Partnership through Linkage

Any eligible jurisdiction wishing to link to the HOAHMP must complete ***all*** of the following steps:

1. The Steering Committee and Planning team has established an annual window for which linkage to the plan can occur. The window of opportunity to initiate the linkage process will be open from February 1st to the last calendar working day of April during any year. Linking jurisdictions are instructed to complete the following procedures during this time frame. All elements of this linkage procedure must be completed no later than April 30 of any given year.

2. The currently non-participating jurisdiction contacts the Humboldt Operational Area Point of Contact (HOAPOC) for the plan and requests a "Linkage Package". The Humboldt Operational Area Point of Contact is:

   Mr. Dan Larkin

   Emergency Services Coordinator

   Humboldt County Office of Emergency Services

   826 4th street

   Eureka, CA 95501

   Phone#: (707) 268-2502

   email: dlarkin@co.humboldt.ca.us

3. The HOAPOC will provide a linkage packages that includes:
   - Copy of Volume 1 and 2 of the plan (CDROM)
   - Planning partner's expectations sheet.

- A sample "letter of intent" to link to the HOAHMP.
- 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 (44CFR), which define the federal requirements for a Local Hazard Mitigation Plan.

4. The new jurisdiction will be required to review both volumes of the HOAHMP which includes the following key components for the planning area:
   - The operational area risk assessment;
   - The plans goals and objectives;
   - Plan implementation and maintenance procedures;
   - Comprehensive review of alternatives; and
   - County-wide initiatives.

   Once this review is complete, they will complete their jurisdiction specific annex by following the template and its instructions for completion provided by the HOAPOC. 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 HOAPOC 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 HOAPOC will determine who will provide the TA and the possible level of TA based on resources available at the time of the request.

5. The new jurisdiction will also be required to develop a public involvement strategy that ensures their 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 available resources to aid in the public involvement strategy such as the Plan website. However, it will be the new jurisdictions responsibility to implement and document this strategy for incorporation into their 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 operational area that is described in volume 1 of the plan. Since the new partner was 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 Regional plan.

6. Once their public involvement strategy is completed and they have completed their template, the new jurisdiction will submit the completed package to the HOAPOC for a pre-adoption review to ensure conformance with the Regional plan format.

7. The HOAPOC 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 Operational Area hazard mitigation plan;
- A Designated point of contact; and
- A ranking of risk specific to the jurisdiction.

The HOAPOC 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 their review and comment prior to submittal to the California Office of Emergency Services (CAOES).

8. Plans approved and accepted by the Steering Committee will then be forwarded to the CAOES for review with 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.

9. CAOES will reviews plans for DMA2K compliance. Non-Compliant plans are returned to the Lead agency for correction. Compliant plans are forwarded to FEMA Region IX office for review with annotation as to the adoption status.

10. FEMA Region IX reviews the new jurisdiction's plan in association with the approved plan to ensure DMA compliance. Region IX notifies new jurisdiction of results of review with copies to CAOES and approved planning authority.

11. New jurisdiction corrects plans shortfalls (if necessary) and resubmits to CAOES through the approved plan lead agency.

12. For plans with no shortfalls from the Region IX review that have not been adopted, the new jurisdiction governing authority adopts the plan (if not already accomplished) and forwards adoption resolution to Region IX with copies to lead agency and CAOES.

13. Region IX 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 on-going 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 voluntarily ask to be removed from the partnership. This may be done because the partner has decided to develop their own plan or has identified a different planning process for which they can gain eligibility. For what ever the reason, a partner that wishes to voluntarily leave the partnership, shall inform the HOAPOC 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 they are deemed eligible under the new planning effort, before they initiate this action to avoid any period where they would be considered non-complaint with the Disaster Mitigation Act.

Once the HOAPOC has received this notification, they shall immediately notify both CAOES and FEMA Region IX in writing that the partner in question is no longer covered by the HOAHMP, 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 under chapter 7 or Volume 1 of the plan. It should be noted, that each partner agreed to these specified terms by adopting the plan.

Eligibility status of the planning partnership will be monitored by the HOAPOC. The determination of whether a partner is not meeting its participation requirements will be based on the following parameters:

- Are annual progress reports being submitted annually by the specified time frames?
- Are partners notifying the HOAPOC 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?

The point here is that participation in the effort 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 operational area. Failure to support this premise, lessen the effectiveness of this effort. The following procedures will be followed to remove a partner due to the lack of participation:

1. The HOAPOC will advise the Steering Committee of this pending action and provide evidence or justification for the action. Examples of justification may include: multiple failures to submit annual progress reports, failure to attend meetings determined to be mandatory by the Steering Committee, unable to contact designated staff at a minimum of 5 attempts, or failure to act on their action plan.

2. The Steering Committee will review information provided by HOAPOC, 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.

3. Once the Steering Committee has approved an action, the HOAPOC 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.

4. 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.

5. 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 HOAPOC. 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.

6. 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.