

**PART 1—
BACKGROUND INFORMATION**

BACKGROUND INFORMATION

ACKNOWLEDGMENTS

Humboldt County

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- Rob Flaner, CFM
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Special Acknowledgments

The development of this plan would not have been possible without the dedication and commitment to this process by the Humboldt Operational Area Hazards Mitigation Plan Steering Committee and all of the Planning Partners. Bringing together 26 eligible local governments from within the Humboldt Operational Area to create a uniform natural hazard mitigation strategy was a remarkable task. Their input, timely review of documents, and energy given to the development of this plan is greatly appreciated. The following table lists the Partnership representatives who contributed to the development of the plan.

HUMBOLDT OPERATIONAL AREA HAZARD MITIGATION PLAN PLANNING PARTNERSHIP REPRESENTATIVES			
Jurisdiction	Point of Contact	Telephone #	E-mail Address
City of Arcata	Doby Class	(707) 825-2170	dclass@arcatacityhall.org
City of Blue Lake	Wiley Buck	(707) 668-5655	bluelakecm@aol.com
City of Eureka	Gary M. Bird	(707) 441-4165	GBIRD@ci.eureka.ca.gov
City of Ferndale	Jay Parish	(707) 786-4224	citymanager@ci.ferndale.ca.us
City of Fortuna	Duane Rigge	725-7600	drigge@ci.fortuna.ca.us
City of Rio Dell	Jim Hale	(707) 764-3532	pwd@riodellcity.com
City of Trinidad	Kenneth J. Thrailkill	(707) 677-0133	kthrailkill@trinidatpd.org
Arcata Fire Protection District	Desmond Cowan	(707) 825-2000	dcowan@arcatafire.org
County of Humboldt	Dan Larkin	(707) 268-2502	DLarkin@co.humboldt.ca.us
Garberville Sanitary District	Herb Schwartz	(707) 923-2223	herb@changemediation.com
Humboldt #1 Fire Protection Dist.	Kathy Hendricks	(707) 445-4900	khendricks@hfd1.org
Humboldt Bay HR&CD	David Hull	(707) 443-0801	dhull@portofhumboldtby.org
Humboldt Bay Municipal Water Dist.	John Palmquist	(707) 443-5018	palmquist@hbmwd.com
Humboldt CSD	Dan Lovett	(707) 443-4559	dlovet@humboldtcsd.com
McKinleyville CSD	Tom Marking	(707) 839-3251	mcsdgm@mckinleyvillecsd.com
Orick CSD	Karla Cummings	(707) 845-0935	ocsdww@gmail.com
Orleans CSD	Shirley Reynolds	(530) 627-3454	ocsdshirleyr1@juno.com
Reclamation District #768	Domingo Santos	(707) 822-1366	N/A
Redway CSD	Troy Harrington-Dean	(707) 923-3101	rcsd@earthlink.net
Resort Improvement District #1	Richard Culp	(707) 986-7447	gm@sheltercove-ca.gov
Rio Dell Fire Protection District	Shane Wilson	(707) 764-3937	SHAWIL22@aol.com
Samoa Peninsula FPD	Troy Nicolini	(707) 443-6484	Troy.Nicolini@noaa.gov
St. Joe's Health System	John Goossens	(707) 445-8121	jgoossen@sje.stjoe.org
Weott CSD	Lou Iglesias	(707) 946-2643	dogwood62@humboldt.net
Willow Creek CSD	Steve Pain	(530) 629-2136	willowcreekcsd@hotmail.com
Willow Creek FPD	Frederick Filyau	(530)-629-2953	willowcreekfpd@yahoo.com

CSD = Community Services District; FPD = Fire Protection District;
HR&CD = Harbor, Recreation and Conservation District

HOW TO USE THIS PLAN

One of the benefits of multi-jurisdictional planning is the ability to pool resources and eliminate redundant activities within a planning area that has uniform risk exposure and vulnerabilities. The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning under its guidance for the Disaster Mitigation Act. Section 206.1 of Code of Federal Regulation Chapter 44 (44CFR) establishes criteria for multi-jurisdictional plans. This plan has been set up in two volumes so that elements that are jurisdiction-specific can easily be distinguished from those that apply to the whole planning area:

- **Volume 1**—Volume 1 includes all the required elements of Section 201.6 of 44CFR that apply to the entire planning area. This includes the description of the planning process, public involvement strategy, goals and objectives, countywide hazard risk assessment, countywide mitigation initiatives, and a plan maintenance strategy.
- **Volume 2**—Volume 2 includes all jurisdiction-specific elements required by Section 201.6 of 44CFR. Jurisdictions that make up the Planning Partnership include cities, the County and special purpose districts. Jurisdiction-specific elements are included in annexes for each planning partner participating in this process and adopting this plan. Volume 2 also includes a description of the participation requirements established by the Steering Committee for the two types of planning partners, as well as instructions and templates that the partners used to complete their annexes. Volume 2 also includes “linkage” procedures for eligible, non-participating jurisdictions that wish to adopt the Humboldt Operational Area Hazard Mitigation Plan (HMP) in the future.

All Planning Partners will adopt Volume 1 in its entirety and at least the following parts of Volume 2: Part 1; each partner’s jurisdiction-specific annex; and the appendices.

DEFINITION OF TERMS AND ACRONYMS

At the end of this volume are appendices that include information supporting the main content of this plan. Also included is a glossary of technical terms and acronyms.

PART 2—THE PLANNING PROCESS

CHAPTER 1.

INTRODUCTION TO THE PLANNING PROCESS

1.1 WHY PREPARE THIS PLAN?

1.1.1 The Big Picture

The federal Disaster Mitigation Act (DMA) of 2000 (Public Law 106-390), commonly known as the 2000 Stafford Act amendments, was approved by Congress on October 10, 2000. This act required state and *local governments* to develop hazard mitigation plans as a condition for federal grant assistance. Prior to 2000, federal legislation provided funding for disaster relief, recovery, and some hazard mitigation planning. The DMA improves upon the planning process by emphasizing the importance of communities planning for disasters before they occur.

Hazard mitigation is any action taken to permanently eliminate or reduce long-term risks to human life and property from natural hazards. This is an essential element of emergency management, along with preparedness, response and recovery. Disasters can have significant impacts on communities. They can destroy or damage life, property and infrastructure, local economies, and the environment.

The Humboldt Operational Area Hazard Mitigation Plan (HMP) helps protect residents' health, safety, and economic and environmental interests. Careful, long-term planning prior to disasters can help reduce the impacts of natural hazards and increase a community's resilience through awareness and implementation of mitigation actions. Fewer lives, homes and businesses will be lost and a disaster event's disruption to the community will be lessened. Ultimately, a community that is hazard-resilient is more likely to remain intact economically, structurally, socially and environmentally when a disaster occurs.

1.1.2 Local Concerns

Several factors initiated this planning effort for Humboldt County and its planning partners:

- Funding through the federal Hazard Mitigation Grant Program (HMGP) has been used in the past by Humboldt County, and the County wants to remain eligible for this type of funding.
- The County wanted to enhance its grant funding options by creating a plan that would be compliant with other grant funding programs such as the Pre-Disaster Mitigation Grant Program (PDM), and the Flood Mitigation Assistance Grant Program (FMA).
- The County wanted to be proactive in its actions to mitigate the probable impacts of natural hazards.

With these factors in mind, Humboldt County committed to the preparation of the plan by attaining funding for the effort through grants, and then securing the technical assistance to facilitate a planning process that would achieve compliance with multiple program requirements.

1.2 WHY PREPARE A MULTI-JURISDICTIONAL PLAN?

Once the commitment to prepare a plan was made, the County was faced with the question of whom to include in the effort. The County could go it alone and prepare a plan that would only cover unincorporated areas; or it could seek other planning partners within the operational area to pool

resources that would support the planning effort. The latter option was chosen based on the following considerations:

- The County provides many services on a countywide basis that influence or directly impact the four phases of emergency management.
- Due to limited financial resources at the municipal level, the ability of each city and district to prepare a DMA-compliant plan was uncertain.
- There is a natural planning area boundary that coincides with the jurisdictional boundaries of the County's emergency management function.

CHAPTER 2. PLANNING PARTNERS AND PLANNING AREA

The County of Humboldt, seven cities, and 18 special purpose districts make up the Humboldt Operational Area Planning Partnership. All Planning Partners have participated in the development of this plan and will adopt it pursuant to the requirements of Section 201.6.c.5 of the Code of Federal Regulations Chapter 44 (44CFR). The defined planning area boundary is contiguous with the Humboldt Operational Area boundary. Figure 2-1 shows the planning area for this plan.

2.1 CITY/COUNTY PLANNING PARTNERS

There are seven incorporated cities in Humboldt County. All of these cities and the County are part of the Humboldt Operational Area Planning Partnership. Table 2-1 lists the municipal planning partners, along with their designated points of contact.

TABLE 2-1. MUNICIPAL PLANNING PARTNERS		
Jurisdiction	Point of Contact	Title
City of Arcata	Doby Class	Director of Public Works
City of Blue Lake	Wiley Buck	City Manager
City of Eureka	Gary M. Bird	Special Projects Manager
City of Ferndale	Jay Parish	City Manager
City of Fortuna	Doug Jackson	P.E., City Engineer
City of Rio Dell	Jim Hale	Director of Public Works
City of Trinidad	Kenneth J. Thrailkill	Chief of Police
Humboldt County	Dan Larkin	Humboldt County Emergency Services Coordinator

2.2 SPECIAL PURPOSE DISTRICT PARTNERS

Section 2.1.2 of 44CFR defines a “*local government*” as:

Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under state law), regional or interstate government entity, or agency or instrumentality of a local government, or Alaska Native Village or organization; and any rural community, unincorporated town or village, or other public entity.

With this definition in mind, Humboldt County extended an invitation to participate to all eligible special purpose districts within the planning area. Out of these eligible districts, 18 formally committed to the process by providing letters of intent to participate. The participating districts are identified in Table 2-2. Humboldt State University (HSU) was also invited to participate in this process, and agreed to support the planning effort by attending meetings and occupying a seat on the steering committee.

Any currently non-participating local government within the Humboldt Operational Area can “dock” to this plan by following the linkage procedures for this plan that are defined in Appendix B of Volume 2.

<p style="text-align: center;">TABLE 2-2. SPECIAL DISTRICT COALITION PLANNING PARTNERS</p>		
District	Point of Contact	Title
Orleans CSD	Shirley Reynolds	District Manager
Orick CSD	Karla Cummings	Program Manager
Humboldt CSD	Mark Bryant	General Manager
Willow Creek CSD	Steve Pain	District Manager
Willow Creek Fire protection District	Frederick R. Filyau	Chairperson
Weott CSD	Lou Iglesias	Director
McKinleyville CSD	Tom Marking	General Manager
Redway CSD	Troy Harrington Dean	Business Manager
Humboldt #1, Fire Protection District	Kathy Hendricks	Executive Secretary
Arcata Fire Protection District	Desmond Cowan	Fire Captain
Rio Dell Fire Protection District	Shane Wilson	Fire Chief
Samoa Peninsula FPD	Troy Nicolini	Chairperson
Resort Improvement District #1	Richard Culp	General Manager
St. Joe’s Health System	John Goossens	Construction Manager
Garberville Sanitary District	Herb Schwartz	Chairperson
Humboldt Bay Municipal Water District	John Palmquist	Business Analyst
Humboldt Bay HR&CD	David Hull	Chief Executive Officer
Reclamation District #768	Domingo Santos	Board President

CHAPTER 3. PLAN DEVELOPMENT METHODOLOGY

3.1 PLANNING RESOURCE ORGANIZATION

The first phase in the development of the plan was to organize the resources needed for a successful planning effort. Under this phase, Humboldt County assessed its readiness to plan by securing FEMA grant funds, establishing a planning team, seeking technical assistance, and engaging the public to determine public perception of risk and support of hazard mitigation. This phase also included coordination with other local, state and federal agencies involved in hazard mitigation in the region to ensure a consistent platform with other ongoing efforts. This phase had seven primary objectives:

- Secure grant funding
- Form a planning team
- Establish a Planning Partnership
- Establish a Steering Committee
- Coordinate with other agencies
- Review existing programs
- Engage the public.

3.2 GRANT FUNDING

This planning effort was supplemented by FEMA Hazard Mitigation Planning grants from two programs:

- The Pre-Disaster Mitigation Grant Program (PDM), created under the Disaster Mitigation Act of 2000—This competitive grant program funds proactive pre-disaster hazard mitigation projects and plans. Funds are appropriated to this program annually by Congress.
- The Flood Mitigation Assistance Grant program (FMA)—The FMA program, funded by the National Flood Insurance Program (NFIP), provides funding for plans and projects that will mitigate the impacts of flooding and flood-related hazards. The flood components of the plan were in part funded by this FMA grant.

The two grants covered 75 percent of the cost for development of this plan and were a key element in the success of the planning effort.

3.3 FORMATION OF THE PLANNING TEAM

Humboldt County personnel determined that staff resources to complete this task were not sufficient to achieve all of the desired objectives of the plan. A decision was made to hire a consultant to assist with development and implementation of a planning process that would achieve DMA compliance for the County. Following County hiring protocol, Winzler & Kelly Consulting Engineers and Tetra Tech/KCM Inc. were hired to assist with the planning process. The Winzler & Kelly project manager assumed the role of the lead planner and reported directly to a project manager assigned by the County. Once the technical assistance was secured, a planning team was formed to lead the planning effort according to a defined scope of work. Table 3-1 lists the members of this planning team.

**TABLE 3-1.
PLANNING TEAM MEMBERS**

Name	Department/Agency	Role
Tom Hofweber	Humboldt County Community Development Services	Supervising Planner, Project Oversight
Cybelle Immitt	Humboldt County Community Development Services	Planner II, Project Manager
Chinmaya Lewis	Humboldt County Community Development Services	GIS Planner
Meghan Ryan	Humboldt County Community Development Services	Planning Technician, Project Support
Pat Kaspari	Winzler and Kelly	Consultant, Project Manager
Rob Flaner, CFM	Tetra Tech, Inc.	Lead Planner
Rob Holmlund	Winzler and Kelly	Planner, Project Support
Bill Bohn	Tetra Tech, Inc	HAZUS Lead

3.4 ESTABLISH A PLANNING PARTNERSHIP

Once the planning team was established, the process of forming a Planning Partnership guided by a Steering Committee was initiated. On March 23, 2006, a planning kickoff meeting was held at the Humboldt County Correctional Facility Training Room in Eureka. All eligible local governments within the planning area were invited to attend. Various agency and citizen stakeholders were also invited to this meeting. The purpose of this session was to:

- Provide an overview of the Disaster Mitigation Act
- Outline the Humboldt County work plan
- Illustrate the benefits of multi-jurisdictional planning
- Solicit planning partners
- Form a Steering Committee.

All interested local governments were provided with a list of planning partner expectations developed by the planning team and were informed of the obligations required for participation. Local governments wishing to join the planning effort were asked to provide the planning team with a “Notice of Intent to Participate” that agreed to the planning partner expectations and designated a point of contact for their jurisdiction. In all, the planning team received formal commitment from 26 planning partners, and the Humboldt County Planning Partnership was formed.

3.5 THE STEERING COMMITTEE

Hazard mitigation planning is one of the best ways to enhance collaboration and gain support among multiple parties whose interests might be affected by hazard losses. By working together, a broad range of stakeholders can identify and create partnerships that pool resources to achieve a common vision for the community. The work plan established for this process was built around this concept by the formation of a steering committee that would oversee all phases of the plan’s development. During the March planning kickoff meeting, a list of candidates representing interests within the planning area was generated. The partnership decided that the committee should not exceed 17 members. Seventeen representatives volunteered to serve in this capacity. Table 3-2 lists the steering committee members.

**TABLE 3-2.
STEERING COMMITTEE MEMBERS**

Name	Title	Jurisdiction/Agency	Representing
Bill Gillespie	Assistant Fire Chief/Fire Marshal	City of Eureka Fire	Planning Partner (City)
Clarke Guzzi	Administrative Analyst II	Humboldt Co. Public Health	Planning Partner (Unincorporated County)
Dan Larkin	Emergency Services Coordinator	Humboldt Co. Office of Emergency Services	Planning Partner (Unincorporated County)
Dave Hull	Chief Executive Officer; Harbor Master; and Port Director	Hum Bay Harbor & Rec. District	Planning Partner (Special District)
Doby Class	Director of Public Works/ City Engineer	City of Arcata	Planning Partner (City)
Doug Jackson	City Engineer/Building Official	City of Fortuna	Planning Partner (City)
Jay Parrish	City Manager	City of Ferndale	Planning Partner (City)
John Goossens	Construction Manager	St. Joseph Hospital	Stakeholder
Kathi Hendricks	Executive Secretary	Fire Protection District, Humboldt #1	Planning Partner (Special District)
Ken Thraikill	Chief of Police	City of Trinidad, PD	Planning Partner (City)
Lou Iglesias	District Board Member	CSD, Weott	Planning Partner (Special District)
Mark Bryant	General Manager	CSD, Humboldt	Planning Partner (Special District)
Melissa Martel	Supervising Environmental Health Specialist	Humboldt County Environmental Health	Planning Partner (Unincorporated County)
Patrick Vaughan	Engineering Geologist	California State Parks	Stakeholder
Peggy O'Neill	Planning Director	Yurok Tribe	Stakeholder
Steaven Greenwood	President	Advanced Aerodynamics Institute of Research	Resident/Stakeholder
Yvonne Everett	Associate Professor of Natural Resources Planning	Humboldt State University, Department of Environmental and Natural Resources Sciences	Stakeholder

Leadership roles and ground rules were established during the Steering Committee's initial meeting on August 2, 2006. The Steering Committee agreed to meet on the first Wednesday of every month as needed throughout the course of the plan's development. The Humboldt County Planning Team facilitated each Steering Committee meeting, which addressed a set of objectives based on the work plan established for the plan. The Steering Committee met eight times from August 2006 to September 2007. Meeting agendas, minutes and attendance logs were maintained by the planning team and are available for review upon request. All Steering Committee meetings were open to the public and agendas and meeting minutes were posted to the web.



Figure 3-1: Steering Committee Meeting #8, September 5, 2007

3.6 COORDINATION WITH OTHER AGENCIES

Section 201.6.b.2 of 44CFR requires that opportunities to be involved in the planning process be provided for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, businesses, academia and other private and nonprofit interests. This task was accomplished in the following ways by the planning team:

- To establish the Planning Partnership, local and regional agencies that are impacted by the DMA based on its definition of “local government” were invited to participate in the process from the outset. Agencies that wanted to be involved committed to being a Planning Partner.
- Many of these agencies were invited to sit on the Steering Committee. This helped to achieve a diverse Steering Committee that includes representatives from academia, agencies responsible for emergency response, an emergency management agency, local city government, as well as State Parks.
- A due-diligence effort was made to keep other important agencies apprised of the planning process. The following agencies were invited to participate in this process from the beginning and were kept apprised of plan development milestones:
 - Federal Emergency Management Agency (FEMA) Region IX
 - California Office of Emergency Services
 - California Department of Transportation
 - Bureau of Land Management
 - California Department of Forestry and Fire Protection
 - California State Parks
 - Red Cross.

All of these agencies received pertinent meeting announcements, meeting agendas and meeting minutes via e-mail. They were also invited to provide comment and input on the draft plan during the public review phase of the planning process

3.7 REVIEW OF EXISTING PROGRAMS

Section 201.6.b(3) of 44CFR states that a hazard mitigation plan shall include a review and incorporation, if appropriate, of existing plans, studies, reports, and technical information as part of the planning process. Chapter 9 of this plan provides a review of laws and ordinances in effect within the planning area that can impact hazard mitigation initiatives. In addition to these regulatory programs, the following planning programs in effect within the planning area can affect mitigation initiatives:

- Humboldt Operational Area Emergency Response Plan: This is an emergency support function-based plan that directs emergency response actions in the planning area.
- Humboldt County General Plan: Amended in February 2003, this plan directs land use policy in Humboldt County.
- The regulatory capability of each municipal planning partner has been identified in the jurisdictional annexes contained in Volume 2 of this plan. This review also includes identification of existing plans and programs that will enhance or support the hazard mitigation initiatives identified by this plan.

In addition to these specified programs, all planning partners reviewed their regulatory, planning, technical and financial capability as part of the preparation of the jurisdictional annexes in Volume 2.

3.8 PLAN DEVELOPMENT CHRONOLOGY/MILESTONES

Development of the Humboldt Operational Area Hazards Mitigation Plan included seven phases:

- Phase 1—Project Startup, Initial Coordination and Coordination
- Phase 2—Hazard Identification and Profiling
- Phase 3—Asset Inventory and Vulnerability Analysis
- Phase 4—Develop Mitigation Initiatives
- Phase 5—Prepare Draft Plan
- Phase 6—Plan Review and Revision
- Phase 7—Plan Adoption and Submittal.

These seven phases were completed from December 2005 to November 2007. Table 3-3 summarizes important milestones in the plan's development.

**TABLE 3-3.
PLAN DEVELOPMENT CHRONOLOGY/MILESTONES**

Date	Event	Milestone	Attendance
2005			
2/08	Board of Supervisors authorized Community Development Services to make application to FEMA for grant funds	Permission to seek hazard mitigation planning funds	N/A
9/8	FEMA approval of FMA04 grant application and funding awarded	Flood mitigation planning grant funds secured	N/A
9/23	FEMA approval of PDM-05 grant application and funding awarded	Hazard mitigation planning grant funds secured	N/A
12/9	Multi-Jurisdictional orientation meeting	Initiation of the process of developing the Humboldt County Multi-Agency Multi-Hazard Mitigation Plan.	27
2006			
3/23	Multi-jurisdictional kickoff meeting	Establish the Planning Partnership	26
6/6	Planning consultant selection	Define scope of work for planning process and identify planning leadership	N/A
7/19	First meeting of Planning Partnership and Stakeholders	Establish the Steering Committee and build Planning Partnership	46
8/2	1st Steering Committee meeting	Establish ground rules Develop public involvement strategy	20
9/02	Notice of Intent to Participate due from Planning Partners.	Formalize initial Planning Partner membership	N/A
10/4	2nd Steering Committee Meeting	Finalize questionnaire content, format, and means of dissemination Public involvement, Phase 1 Review Hazard Mitigation Plan Outline Preview hazard ID maps	21
12/6	3rd Steering Committee meeting	Define critical facilities Public meeting roles Confirm Hazard Mitigation Plan Outline Review hazard ID maps	23
12/5	Questionnaire dissemination	Questionnaire disseminated throughout the planning area by the Planning Partners via various means. The comment period extended through to January 31, 2007 as dictated by the public involvement strategy. The total number of questionnaires disseminated was 1,715.	217 were returned

**TABLE 3-3.
PLAN DEVELOPMENT CHRONOLOGY/MILESTONES**

Date	Event	Milestone	Attendance
2007			
1/18 and 1/19	Public Meeting series #1	Open house format meeting held in two locations with the following objectives: <ul style="list-style-type: none"> • Present hazard identification • Gauge public’s perception of risk. • Inform public of planning process. • Opportunity to provide comment. 	29 participants on 1/18 and 30 on 1/19
1/10	4th Steering Committee meeting	Public meeting preparation Approve draft Critical Facilities definition Draft plan guiding principles/mitigation mission statement Begin process of identifying Goals and Objectives.	18
3/07	5th Steering Committee Meeting	Finalize mission statement, goals, and objectives Review draft Planning partner templates Review Risk Assessment Chapters *(Flood and Earthquake) Receive a report on public questionnaire results	17
4/04	6th Steering Committee Meeting held jointly with Planning Partners	Strengths, weaknesses, opportunities, obstacles (SWOO) Review, approve mitigation alternatives catalog (via email)	24
5/9	Planning Partner Workshop	Mandatory workshop for all district planning partners to cover the completion of the jurisdictional annex template.	29
5/10	Tribal Partner Workshop	Determine how tribes located within the Humboldt Operational Area will be represented in the plan.	15
5/10	Planning Partner Workshop	Mandatory workshop for all city planning partners to cover the completion of the jurisdictional annex template.	19
May thru June	Prepare jurisdiction-specific annexes for all Planning Partners	One-on-one meeting with Planning Partners as necessary to complete jurisdictional-specific annexes	N/A
July-Aug	Assemble the plan	Volumes I and II prepared by the planning team	N/A
8/02	7th Steering Committee Meeting	Confirmed intent to maintain the Steering Committee after plan adoption to guide implementation and updates. Approved draft of Plan Maintenance chapter Review Plan development timeline PDM-c grant update Risk Assessment review completion confirmed Public review process	17

**TABLE 3-3.
PLAN DEVELOPMENT CHRONOLOGY/MILESTONES**

Date	Event	Milestone	Attendance
9/5	8th Steering Committee meeting	Approve Countywide Initiatives Introduction to review draft of the complete first draft of the plan (both Volumes I and II of the plan) Outline the review responsibilities of Steering Committee Public meeting preparation	
9/5-9/10	Internal Review	Review of complete 1st draft plan by Planning Partners and Steering Committee	N/A
9/10	Public Comment period open	Draft plan posted on County web site Press releases sent out	N/A
9/30	Agency Review	Draft plan sent to California Office of Emergency Services (CAOES), FEMA, and ISO	N/A
10/4	Public Meeting #3	1st public meeting for the public to comment on draft plan. Open house format public meeting held in Eureka to provide the public an additional opportunity to comment on the draft plan.	5
10/19	Public comment period closes		N/A
10/19	Volume 1, Volume 2 edited based on comments received, final draft plan posted on County website.		N/A
10/19	Plan submitted to CAOES and FEMA region IX with request for pre-adoption review		N/A
2008			
1/28/08	Plan Approval by FEMA region IX		N/A

CHAPTER 4. PUBLIC INVOLVEMENT STRATEGY

Section 201.6.b.1 of 44CFR requires that the public have opportunities to comment on disaster mitigation plans during the drafting stages and prior to plan approval. The Community Rating System (CRS) expands on these requirements by making CRS credits available for optional public involvement activities. With these factors in mind, the planning team drafted a public involvement strategy that was comprehensive, using multiple media sources available within the County.

4.1 STRATEGY

As part of the work plan for the Humboldt Operational Area Hazard Mitigation Plan, a complete strategy was developed for involving the public that emphasized the following elements:

- Solicit public involvement in the development of the plan by including members of the public on the Steering Committee.
- Use a questionnaire to gauge the public's perception of risk and support of hazard mitigation and to get direction on alternatives.
- Attempt to reach as many citizens in the planning area as possible through the use of multiple media.
- Identify and involve stakeholders in the planning area.

4.1.1 Steering Committee

All of the Steering Committee members are residents of Humboldt County. Because of this, the committee's knowledge level on County-specific issues is very high. Five of the Steering Committee members represented key stakeholders within the planning area as well as academic representation from Humboldt State University, which helped ensure a well-rounded point of view from this committee. The interests represented by each Steering Committee member are listed in Table 3-2.

4.1.2 Questionnaire

A Hazard Mitigation Plan Questionnaire (see Figure 4-1) was developed for the Humboldt Operational Area by the planning team with guidance from the Steering Committee. The questionnaire was used to gauge household preparedness for natural hazards and the level of knowledge of tools and techniques that assist in reducing risk and loss from natural hazards. This questionnaire was designed to help identify areas vulnerable to one or more natural hazards. It asked 21 quantifiable questions, the answers to which could help guide the Steering Committee in selecting goals, objectives and mitigation strategies. Over 1,700 questionnaires were disseminated throughout the planning area by multiple means. The complete questionnaire and a summary of its findings can be found in Appendix B of this volume.

4.1.3 Opportunity for Public Comment

The strategy used by the planning team to provide opportunities for public comment focused on public meetings, press releases, email list-servers and the internet. An overview of the opportunities for public comment follows.

GENERAL HOUSEHOLD INFORMATION

The following information will aid the Steering Committee in determining the hazard mitigation needs of Humboldt County by providing important demographic information that can be used to quantify answers provided in this questionnaire. The answers provided in this section will be treated as confidential and will be used solely for the preparation of this plan and will not be provided to any other group or interest. All answers in this section are optional.

16.) Please indicate your age range:

18 to 29 50 to 59
 30 to 39 60 or over
 40 to 49

17.) Gender:

Male Female

18.) Please indicate your highest level of education:

Grade school/no schooling College Degree
 Some High School Post Graduate degree
 High School Graduate/GED Other _____
 Some College/Trade School

19.) How long have you lived in Humboldt County?


Less than 1 year 10 to 19 years
 1 to 4 years 20 years or more
 5 to 9 years

20.) Do you have access to the Internet or "World Wide Web"?

Yes No

21.) Other Comments:

**Hazard Mitigation Plan
Questionnaire
Humboldt Operational Area**




A regional planning partnership of communities, agencies and stakeholders has recently been formed to address natural disasters that may occur in Humboldt County. A Steering Committee has also been selected to oversee this process. In order to identify and plan for future natural disasters, we need assistance from the citizens of Humboldt County.

This questionnaire is designed to help us gauge the level of knowledge local citizens already have about natural disaster issues. Our questionnaire also asks for information you may have about areas vulnerable to any type of natural disaster. The information you provide will help us coordinate activities to reduce the risk of injury or property damage in the future.

The Humboldt County Partnership thanks you for taking the time to participate in this information-gathering process.

The Humboldt County Operation Area



For more information, please visit the Humboldt County website at www.co.humboldt.ca.us/planning

Humboldt County Community
Development Services
Planning Division
3015 H St.
Eureka, CA 95501

NOTE: If someone has not arranged to receive this from you, please mail this to:
Humboldt County Community Development Services, Planning Division
3015 H St.
Eureka, CA 95501

Thank you for your time and effort in completing this questionnaire. Your input to this important process is invaluable, and will help direct future disaster planning in our community.

Please complete and return as soon as possible, but no later than Jan 15, 2007.
Questionnaires received after this date will not be tabulated.

Figure 4-1: Sample Page of Questionnaire Distributed to the Public

Public Meetings

Three public meetings were held during development of the plan. The Steering Committee determined that the planning area could easily be divided into a north section and a south section. This would give the majority of the citizens in the planning area an opportunity to attend public meetings if they desired. At the beginning of the process, two open houses were held in January 2007. One was held in Arcata (north section) on January 18 and the second was held in Fortuna (south section) on January 19 (see Figure 4-4). These open houses ran from 6:30 to 8:30 p.m. During these meetings the reasons for planning and the information generated for the risk assessment were shared with attendees via a short PowerPoint presentation by the planning team. Tables were set up specific to the primary hazards to which the County was most vulnerable. Attendees could see risk-based information pertinent to their geographical location. Planning partners and the planning team were present to answer questions. Each citizen attending these open houses was asked to complete a questionnaire before leaving or to take one home with them to complete and return, and each was given an opportunity to provide written comments and recommendations to the Steering Committee. Local media outlets were informed of these open houses by a formal press release from the County and were in attendance during these sessions.



Figure 4-2: Public Meeting #1, January 18, 2007



Figure 4-3: Planning team presentation at meeting #1



Figure 4-4: Filling out questionnaires at Public Meeting #2



Figure 4-5: Risk based mapping shared with the public

Once the draft plan was assembled, a public comment period was initiated on September 10, 2007 and was open for public input until October 19, 2007. One final public meeting was held on October 4, 2007 in Eureka. Notice of this meeting was provided to all media outlets via a formal press release by the County. The purpose of this meeting was to make available and describe the complete draft plan, explain the plan development process to the public and request public review and comment. The session ran from 6:00 to 8:00 p.m., and was a standard-format public meeting. Members of the planning team gave a presentation that outlined the reasons for the plan, the process used in the plan's development, the key recommendations of the plan, and an opportunity for questions and answers. All attendees were given a copy of the executive summary for the plan. Due to the size of the plan, attendees were encouraged to review the entire document on-line at the HMP website.

Press Releases

Prior to all of the public meetings discussed above, press releases containing information on the meeting's time, location and purpose (see Appendix C) were disseminated throughout the planning area. A 200-plus member stakeholder list-server was used to distribute the press release. In addition, the targeted media outlets included:

- The Arcata Eye
- The Times-Standard
- The Northcoast Journal
- The Hoopa People Newspaper
- The Kourier
- The Humboldt Beacon
- KRED – Radio
- KHSU – Radio
- KQEX-FM – Radio
- KTMA-AM – Radio
- KVIQ - Television
- The Eel River Reporter
- The Eureka Reporter
- The Independent
- The McKinleyville Press
- The Redwood Times
- KHUM – Radio
- KMUD – Radio
- KATA – Radio
- KXGO – Radio
- KVIQ - Radio
- KAEF – Television
- KIEM – Television

Internet

At the beginning of this process, a web-site was set up to keep the public posted on plan development milestones and to solicit information pertinent to the development of the plan (see Figure 4-6). This site was part of the Community Development Services page and the address (<http://co.humboldt.ca.us/planning/HazardMitigation/default.asp>) was publicized in all press releases, mailings, questionnaires and public meetings. Information on the Steering Committee, meetings, key elements of the plan, the DMA, Planning Partners and phased drafts of the plan was made available to the public throughout this process. The County intends to keep a website active after the plan's completion to keep the public informed about successful mitigation projects and future plan updates.

4.1.4 Stakeholders

Stakeholders are individuals, agencies and jurisdictions that have a stake in the recommendations of the plan. Regulations developed pursuant to the DMA expand the traditional meaning of this term by redefining “local government.” The new breed of planning partners encouraged under the DMA (i.e. special purpose districts) creates a new list of jurisdictions with a stake in the process. Therefore, each Humboldt County Planning Partner is considered a stakeholder in this plan. An effort was also made to include traditional stakeholders in this process by their inclusion on the Steering Committee. An end result of this expanded definition of stakeholders is an increased accessibility to the constituency within the planning area. This helped lead to a successful public involvement strategy.

4.2 THE RESULTS OF PUBLIC INVOLVEMENT

The Steering Committee considered the input received from the public involvement strategy as a key component in gauging the public's perception of risk, vulnerability and mitigation. By engaging the public through this strategy, the concept of mitigation was introduced to the public, and the steering committee received feedback that was used in developing the components of this plan. Quantifiable elements of this strategy are summarized below.



Figure 4-6: Sample Page from HMP Web Site

4.2.1 Public Meetings

Details of attendance and comments received from the four public meetings held during this process are provided in Appendix C of this volume. Table 4-1 summarizes this data.

**TABLE 4-1.
SUMMARY OF PUBLIC MEETINGS**

Date	Location	Number of Citizens in Attendance	Number of Planning Partners/Steering Committee/ Planning Team Members	Number of Comments received	Number of Questionnaires received
1/18/2007	Arcata	14	13 (7 SC/ 6 PT)	2	2
1/19/2007	Fortuna	21	6 (3 SC/ 3 PT)	3	1
10/4/2007	Eureka	3	6	0	n/a
Total		38	25 (16 SC/ 9 PT)	5	3

4.2.2 Natural Hazards Preparedness Questionnaire

Detailed analysis of the questionnaire findings can be found in Appendix B of this volume. The following is a summary of questionnaire response:

- Number of questionnaires disseminated—1,715
- Number of questionnaires returned at open house—4
- Number of Questionnaires returned via internet—14
- Number of questionnaires returned via mail or at Planning Department front counter—199
- Total questionnaires analyzed—217
- Return Rate—12.7 percent.

CHAPTER 5.

GUIDING PRINCIPLE, GOALS AND OBJECTIVES

5.1 BACKGROUND

Section 201.6.c.3.i of 44CFR requires a local hazard mitigation plan to identify goals for reducing or avoiding long-term vulnerabilities to identified hazards. In an attempt to meet this planning requirement, the Steering Committee embarked on a facilitated planning process that would result in a guiding principle, a set of goals and measurable objectives for this plan. This process was based on data garnered from the preliminary risk assessment for the Humboldt Operational Area and the results of the public involvement strategy implemented for this process. Once a clear definition of mitigation was agreed upon by the Steering Committee, a list of issues that this plan should attempt to address was identified. The common issues identified by all were as follows:

- Potential damage to existing buildings
- New growth and development in identified hazard areas
- Environmental impacts
- Pooling resources
- Isolation
- Economic impact of hazard events.

The Steering Committee selected a guiding principle, goals and objectives to address these issues and guide the mitigation strategies of this plan.

5.2 GUIDING PRINCIPLE

A guiding principle focuses the range of objectives and actions to be considered. This is not a goal because it does not describe a hazard mitigation outcome, and it is broader than a hazard-specific objective. The guiding principle for the plan is as follows:

“Through partnerships and careful planning, identify and reduce the vulnerability to natural hazards in order to protect the health, safety, quality of life, environment, and economy of the communities within the Humboldt Operational Area.”

5.3 GOALS AND OBJECTIVES

The Planning Partnership developed mitigation goals and objectives to reduce or avoid long-term vulnerabilities to identified hazards through discussions, research, meetings of the steering committee and input from stakeholders and the public. The Steering Committee identified six goals through a facilitated exercise, working from a catalog of goal statements created through review of similar plans and FEMA planning guidance. Once the goals were established, objectives that meet multiple goals were selected through a similar facilitated exercise. For the purposes of this plan, goals and objectives are defined as follows:

- **Goals** are general guidelines that explain what is to be achieved. They are usually broad, long-term, policy-type statements and represent global visions. Goals help define the benefits that the plan is trying to achieve. The success of the plan, once implemented, should be

measured by the degree to which its goals have been met (that is, by the actual benefits in terms of hazard mitigation).

- **Objectives** are short-term aims which, when combined, form a strategy or course of action to meet a goal. Unlike goals, objectives are specific and measurable.

5.3.1 Goals

The following are the mitigation goals of the Humboldt Operational Area Hazard Mitigation Plan:

- G-1— Protect Health and Safety
- G-2— Protect Property
- G-3— Protect the Economy
- G-4— Protect Quality of Life
- G-5— Protect Environment
- G-6— Promote Partnerships in Planning.

Achievement of these goals will define the effectiveness of a mitigation strategy. The goals also are used to help establish priorities.

5.3.2 Objectives

The Steering Committee selected objectives that would meet multiple goals, as listed in Table 5-1. The objectives serve as a stand-alone measurement of a mitigation action, rather than as a subset of a goal. Achievement of the objectives will be a measure of the effectiveness of a mitigation strategy. The objectives also are used to help establish priorities.

TABLE 5-1. HUMBOLDT OPERATIONAL AREA HAZARDS MITIGATION PLAN OBJECTIVES		
Objective Number	Objective Statement	Goals for which it can be applied
O-1	Eliminate or minimize disruption of local government operations caused by natural hazards.	1, 2, 3, 4
O-2	Increase resilience of (or protect and maintain) infrastructure and critical facilities	1, 3, 4
O-3	Reduce natural hazard-related risks and vulnerability to the populations in the County of Humboldt	1, 2, 3, 4
O-4	Sustain reliable local emergency operations and facilities during and after a disaster	1, 2, 3, 4
O-5	Seek to enhance the emergency response capability within the planning area	1, 2, 3, 4, 6
O-6	Enhance understanding of natural hazards and the risk they pose through public education that emphasizes awareness, preparation, mitigation, response, and recovery alternatives.	1, 2, 4, 5
O-7	Continually improve understanding of the location and potential impacts of natural hazards that impact the planning area utilizing the best available data and science as it becomes available and share this information with all stakeholders.	1, 2, 4, 5
O-8	Establish a partnership among all levels of government and the business community to improve and implement methods to protect property	2, 3, 5, 6
O-9	Develop and implement natural hazard mitigation strategies that reduce losses to wildlife habitat and protect water supply and quality, while also reducing damage to development.	2, 3, 4, 5
O-10	Integrate hazard identification information and mitigation policies into other planning based processes that direct or impact land uses within the planning area.	2, 3, 4, 5
O-11	Enhance building codes and their proper implementations so that new construction can withstand the impacts of natural hazards and lessen the impact of that development on the environment's ability to absorb the impact of natural hazards.	1, 2, 3, 4
O-12	Seek to integrate/coordinate all phases of Emergency Management within the planning area.	1, 2, 3, 4, 6

CHAPTER 6. PLAN ADOPTION

Section 201.6.c.5 of 44CFR requires documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting federal approval of the plan. For multi-jurisdictional plans, each jurisdiction requesting approval must document that it has been formally adopted. Pre-adoption approval of the plan was granted by California Office of Emergency Services (CAOES) on November 6, 2007. The County of Humboldt adopted the plan on December 11, 2007. All 25 remaining planning partners completed the adoption process by _____, 2008. FEMA Region IX approved the plan on January 28, 2008. All planning partners are considered eligible for the benefits afforded under the Disaster Mitigation Act as of _____, 2007. Copies of the resolutions adopting this plan for all eligible Partners can be found in Appendix D of this volume.

CHAPTER 7. PLAN MAINTENANCE

7.1 OVERVIEW

Title 44 of the *Code of Federal Regulations* (CFR) Section 201.6.c.4 requires a hazard mitigation plan to include a plan maintenance process that includes the following:

- A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a 5-year cycle.
- A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate
- A discussion of how the community will continue public participation in the plan maintenance process.

The plan maintenance section of this document details the formal process that will ensure that the Humboldt Operational Area Hazard Mitigation Plan (HMP) remains an active and relevant document and that the Planning Partnership maintains its eligibility for applicable funding sources. The HMP maintenance process includes a schedule for monitoring and evaluating the plan annually and producing an updated plan every five years. This chapter also describes how the Partnership will integrate public participation throughout the plan maintenance and implementation process. Finally, this chapter explains how the Partnership intends to incorporate the mitigation strategies outlined in this HMP into existing planning mechanisms and programs, such as any relevant comprehensive land-use planning process, capital improvement planning process, and building code enforcement and implementation. The HMP's format allows the Partnership to review and update sections when new data become available. New data can be easily incorporated, resulting in a plan that will remain current and relevant to the Humboldt Operational Area Partnership.

7.2 HMP IMPLEMENTATION

The effectiveness of the Partnership's non-regulatory HMP depends on the implementation of the plan and incorporation of the outlined action items into existing Partnership plans, policies, and programs. The HMP includes a range of action items that, if implemented, would reduce loss from hazard events in the Humboldt Operational Area. Together, the action items in the HMP provide the framework for activities that the Partnership can choose to implement over the next 5 years. The planning team and HMP steering committee have established goals and objectives, and have prioritized identified mitigation actions that will be implemented through existing plans, policies, and programs.

The Humboldt County Department of Community Development Services (CDS) and the Sheriff's Department Office of Emergency Services (OES) will assume lead responsibility for planning and facilitating HMP implementation and maintenance meetings. Although CDS and OES will have primary responsibility for convening these meetings, plan implementation and evaluation will be a shared responsibility among all Planning Partnership members and agencies identified as lead agencies in the mitigation action plans (see Planning Partner Annexes).

7.3 HMP STEERING COMMITTEE

The HMP Steering Committee is a total volunteer body that contributed greatly to the development of the plan. The purpose of this committee was to oversee the development of the HMP and make recommendations on key elements of the plan, including a maintenance strategy. It was the steering committee's position that an oversight committee with representation similar to the initial HMP steering committee should have an active role in the maintenance strategy for the HMP. Therefore, the HMP recommends that an HMP steering committee remain a viable body involved in key elements of the HMP maintenance strategy proposed in this chapter. The steering committee should include representation from the Partnership, the citizens of Humboldt Operational Area, and other stakeholders.

A steering committee of not more than 17 members will convene two times a year at a place and time to be determined to implement HMP annual review procedures outlined in Section 7.4.

7.4 HMP ANNUAL PROGRESS REPORT

The minimum task of the Steering Committee will be the evaluation of the progress of the HMP. This review will include the following:

- Summary of any hazard events that occurred during the prior year and their impact on the planning area
- Review of successful mitigation initiatives identified in the HMP
- Brief discussion about why targeted strategies were not completed
- Re-evaluation of the action plans to determine if the timeline for identified projects needs to be amended (such as changing a long-term project to a short-term project because of funding availability)
- Recommendations for new projects
- Changes in or potential for new funding options (grant opportunities)
- Impact of any other planning programs or initiatives within the Partnership that involve hazard mitigation.

The planning team will create a template to guide the Steering Committee in preparing a progress report. The Steering Committee will provide feedback to the planning team on items included in the template. All Planning Partners will be responsible for submitting progress reports to the planning team using said template. *Note: failure of a Planning Partner to show progress on initiatives may result in that Partner being deemed ineligible under the provisions of the Disaster Management Act of 2000.* The planning team will then prepare a formal annual report on the progress of the HMP. This report will be used as follows:

- Posted on the Partnership website on the page dedicated to the HMP
- Provided to the local media through a press release
- Presented in the form of a Council/Board report to all participating jurisdictional governing bodies.
- Provided as part of the Community Rating System (CRS) annual re-certification package.

The CRS program requires an annual recertification to be submitted by October 1 of every calendar year for which the community has not received a formal audit. To meet this recertification timeline, the planning team will strive to complete this progress report process between June and September each year.

7.5 HMP UPDATE

Section 201.6.d.3 of 44CFR requires that local hazard mitigation plans be reviewed, revised if appropriate, and resubmitted for approval in order to remain eligible for benefits awarded under the Disaster Mitigation Act (DMA). The Humboldt Operational Area Partnership intends to update the HMP on a 5-year cycle from the date of initial plan adoption. This cycle may be accelerated to less than 5 years based on the following triggers:

- A Presidential Disaster Declaration that impacts the Humboldt Operational Area
- A hazard event that causes loss of life
- A comprehensive update of the Humboldt County or participating city's General Plan.

It will not be the intent of this update process to start from scratch and develop a complete new hazard mitigation plan for the Humboldt Operational Area. Based on needs identified by the planning team, this update will, at a minimum, include the elements below:

- The update process will be convened through the steering committee described in Section 7.4.
- The hazard risk assessment will be reviewed and, if necessary, updated using best available information and technologies.
- The action plans will be reviewed and revised to account for any initiatives completed, dropped, or changed and to account for changes in the risk assessment or new Partnership policies identified under other planning mechanisms, as appropriate (such as the general plan).
- The draft update will be sent to appropriate agencies and organizations for comment.
- The public will be given an opportunity to comment on the update prior to adoption.
- The Humboldt Operational Area Partnership governing bodies will adopt their respective portions of the updated plan.

7.6 CONTINUING PUBLIC INVOLVEMENT

The public will continue to be apprised of HMP actions through the Partnership website and by providing copies of the annual progress reports to the media. Copies of the HMP will be distributed to the Humboldt County Library System. Upon initiation of the HMP update process, a new public involvement strategy will be initiated based on guidance from the Steering Committee. This strategy will be based on the needs and capabilities of the Partnership at the time of the update. At a minimum, this strategy will include the use of local media outlets within the planning area.

7.7 INCORPORATION INTO OTHER PLANNING MECHANISMS

The information on hazard, risk, vulnerability, and mitigation contained in this plan is based on the best science and technology available at the time the HMP was prepared. The Humboldt County General Plan and the General Plans of the partner cities are considered to be integral parts of this plan. The County and partner cities, through adoption of General Plans and zoning ordinances, have planned for the impact of natural hazards. The HMP process provided the County and the cities with the opportunity to review and expand on policies contained in these planning mechanisms. The Partnership used the General Plan and the HMP as complementary planning documents that work together to achieve the ultimate goal of reducing the risk of exposure to the citizens of the Humboldt Operational Area. As stated in Section 7.5, a comprehensive update to a General Plan may trigger an update to the HMP. Other planning processes and programs the Partnership will coordinate with the recommendations of the HMP include the following: