

**PART 3—
ANNEXES FOR COMMUNITY SERVICE
DISTRICTS**

CHAPTER 11. HUMBOLDT COMMUNITY SERVICE DISTRICT UPDATE ANNEX

11.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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11.2 JURISDICTION PROFILE

Humboldt Community Services District is a Special District created in 1952 to provide water, sewer, and street lighting to the unincorporated area surrounding the City of Eureka known as Pine Hill, Cutten and Rosewood. The District's designated service areas expanded throughout the years to include other unincorporated areas of Humboldt County known as Myrtle town, Humboldt Hill, Fields Landing, King Salmon, Pigeon Point and Freshwater. A five-member elected Board of Directors governs the District. The Board assumes responsibility for the adoption of this plan while the General Manager will oversee its implementation. As of June 2013, the District serves 7,526 water connections, 6,326 sewer connections, and Street Lights with a current staff of 21. Funding comes primarily through rates and revenue bonds. See attached map for specific District boundaries.

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

- **Population Served**—Approximately 20,000
- **Land Area Served**—15.25 square miles
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$1,143,016,310 (as of 2013)
- **Land Area Owned**—33.91 acres
- **Critical Infrastructure and Equipment Owned:**
 - Approximately 87 miles of water main
 - 3 water wells
 - 13 water booster stations
 - 10 steel water storage tanks
 - 3 metered connections to the City of Eureka
 - 5 un-metered connections to the City of Eureka
 - 1 metered connection to Humboldt Bay Municipal Water District
 - Approximately 70 miles of sewer collection main

- 29 Sewer Lift Stations
- 8 Metered sewer connections with the City of Eureka (3 are incorporated as part of the sewer lift stations, 5 are stand-alone).
- Rolling stock (26 vehicles)
- Main office compound complete with vehicle and equipment storage and parts storage facilities.
- **Total Value of Critical Infrastructure and Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$116,751,514
- **Critical Facilities Owned:**
 - Transmission and distribution pipelines
 - Wells 1 through 3
 - Water Booster Stations 1 through 13
 - 10 Water storage tanks
 - 3 metered connections to the City of Eureka
 - 5 un-metered connections to the City of Eureka
 - 1 metered connection to Humboldt Bay Municipal Water District
 - Sewer collection system mains
 - Sewer lift stations 1 through 29
 - Sewer meter stations, 4, 5, 6, 7 and 8
 - Office, equipment and parts facilities
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$115,337,341
- **Current and Anticipated Service Trends**—The growth rate within HCSD’s service area is based on new residential construction service connections between June 2008 thru June 2013 (5 years). The growth rate during that time period was 2.64%. During that time period there were 86 new apartment units; a few 4 & 6-plex connections; 199 residential connections; and 8 commercial connections. It is expected that approximately the same growth rate will occur between 2014-2018.

11.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Earthquake		1/9/2010	\$40,000
Earthquake	N/A	07/09/2007	\$150,000
Flooding, severe winters and landslides	DR-1628	02/03/2006	\$22,000
Severe weather	N/A	12/1995	\$57,161
Winter storms, flooding, landslides	DR-1044	01/09/1995	\$3,875
Earthquake	N/A	1994	\$158,446
Earthquake	DR-943	04/04/1992	\$23,993

Table 11-1 lists all past occurrences of natural hazards within the jurisdiction.

11.4 HAZARD RISK RANKING

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	45
2	Severe Weather	39
3	Tsunami	24
4	Drought	30
5	Flood	18
6	Wildfire	18
7	Landslide	21
8	Dam Failure	12
9	Earthquake	45

Table 11-2 presents the ranking of the hazards of concern.

11.5 APPLICABLE REGULATIONS AND PLANS

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

- California Department of Public Health
- California and U.S. Environmental Protection Agencies
- Federal Energy Regulatory Commission
- Army Corp of Engineers
- California Environmental Quality Act
- Federal Endangered Species Act
- California Coastal Commission
- Cal Fire/Humboldt Bay Fire Department
- Northern California Unified Air Quality Management District
- HCSD Codes, Ordinances, Policies and Standard Plans and Specifications
- Humboldt County General Plan

11.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

TABLE 11-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	N/A	--	--
Storm Ready	Not Participating	--	--
Firewise	Not Participating	--	--
Tsunami Ready (if applicable)	Not Participating	--	--

Classifications under various community mitigation programs are presented in Table 11-3.

11.7 HAZARD MITIGATION ACTION PLAN

Table 11-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

TABLE 11-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
HCS D-1—Retrofit Tanks							
Existing	Earthquake	1,2,3,4,9	HCS D	600,000.00	HCS D	Completed	Yes
HCS D-2—Enhance water supply system for fire prevention, in areas rated high by Cal Fire							
New and Existing	Wildfire	1,3,4,5	HCS D	1.5 million	HCS D/Grants	Ongoing	Yes
HCS D-3—Acquire support equipment such as backup generators and water pumps							
New and Existing	All Hazards	1,2,3,5,8	HCS D	500,000.00	HCS D/Grants	Ongoing	Yes
HCS D-4—Engineering feasibility study of Critical Facilities for structural and non-structural mitigation							
Existing	Flood & Earthquake	1,2,4,5	HCS D	350,000.00	HCS D/Grants	Long Term	Yes
HCS D-5—Promote public awareness of the risk associated with natural hazards to HCS D rate payers via public information means available to HCS D							
New and Existing	All Hazards	1,2,4	HCS D	15,000.00	HCS D/Grants	Short Term	Yes
HCS D-6—Install earthquake valves on tanks							
Existing	Earthquake	1,2,3,4,9	HCS D		HCS D/Grants	Short Term	No
HCS D-7—Remove tree at Donna Drive tank							
Existing	Severe Weather	1,2,3,9	HCS D	5,000	HCS D	Short Term	No
HCS D-8—Develop and implement a plan to pump water from H.H. system to rest of District							
New and Existing	Earthquake Tsunami Drought	1,3,4,5,7, 10	HCS D	100,000	HCS D/Grants	Short Term	No
HCS D-9—Upgrade water system for fire protection on Ivy League Streets in H.H. area							
New and existing	Wildfire	2,3,4,5	HCS D	301,000	HCS D/Grants	Short Term	No
HCS D-10—Artino St landslide repair							
New and Existing	Landslide	1,2,3	HCS D	20,000	HCS D/Grants	Long Term	No
HCS D-11—Donna Dr. pump house rehab							
Existing	All Hazards	1,2,3,4	HCS D	20,000	HCS D	Short Term	No

**TABLE 11-4.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
HCSD-12—Ridgewood Booster Station pump							
Existing	All Hazards	1,2,3,4	HCSD	15,000	HCSD/Grants	Short Term	No
HCSD-13—Pine Hill SLS rebuild							
Existing	All Hazards	1,2,3,4	HCSD	125,000	HCSD/Grants	Short Term	No
HCSD-14—Truesdale pump upgrade							
Existing	All Hazards	1,2,3,4	HCSD	200,000	HCSD/Grants	Short Term	No
HCSD-15—Hubbard pump upgrade							
Existing	All Hazards	1,2,3,4	HCSD	15,000	HCSD/Grants	Short Term	No
HCSD-16—Hillcrest/ Vista/Linda water main upgrade (fire protection)							
Existing	Wildfire	1,2,3,4	HCSD	403,000	HCSD/Grants	Long Term	No

11.8 PRIORITY OF RECOMMENDED INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
HCSD-1	5	H	L	YES	YES	YES	-
HCSD-2	4	M	L	YES	YES	YES	HIGH
HCSD-3	5	H	L	YES	NO	YES	LOW
HCSD-4	4	M	H	NO	NO	NO	LOW
HCSD-5	3	L	L	YES	YES	NO	LOW
HCSD-6	5	H	H	YES	YES	NO	HIGH
HCSD-7	4	H	M	YES	YES	NO	HIGH
HCSD-8	6	M	H	NO	YES	NO	MED
HCSD-9	4	H	H	YES	YES	YES	HIGH
HCSD-10	3	H	M	YES	YES	YES	HIGH
HCSD-11	4	M	M	YES	YES	NO	HIGH
HCSD-12	4	M	L	YES	YES	YES	HIGH
HCSD-13	4	M	L	YES	YES	YES	HIGH
HCSD-14	4	M	M	YES	YES	NO	HIGH
HCSD-15	4	M	L	YES	YES	NO	HIGH
HCSD-16	4	H	M	YES	YES	YES	HIGH

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 11-5 identifies the priority for each initiative.

11.9 ANALYSIS OF RECOMMENDED INITIATIVES

TABLE 11-6. ANALYSIS OF MITIGATION INITIATIVES						
Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Earthquake	8,4	1, 6	5		3	1,4,6,8,11-15
Severe Weather	8,4	7	5		3	4,8,11-15
Tsunami	8,4		5		3	4,8,11-15
Drought	8,4		5			4,8,11-15
Flood	8,4		5		3	4,8,11-15
Wildfire	2, 8, 9,16	2,8,9,16	5	2,8,9,16	2,3,9	4,8,9,11-16
Landslide	8,4	10	5		3	4,8,10,11-15
Dam Failure	8		5			4,8,11-15

a. See Chapter 1 for description of mitigation types.

Table 11-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

11.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 11-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
HCSD-1	X			
HCSD-2		X		Ongoing
HCSD-3		X		Ongoing
HCSD-4		X		Ongoing
HCSD-5		X		Ongoing

Table 11-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

11.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/ VULNERABILITY

Focused engineering studies of critical infrastructure/facilities

CHAPTER 12. MANILA COMMUNITY SERVICE DISTRICT UPDATE ANNEX

12.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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12.2 JURISDICTION PROFILE

Manila is a rural coastal community with approximately 1000 people. The Manila Community Services District is an independent multi-purpose district located in coastal northern California. The Community Services District is governed by a locally elected 5 member board of directors and was formed on July 20, 1965 by the Humboldt County Board of Supervisors. The district employs a General Manager responsible for administering and implementing policies set by the board.

The district boundary encompasses approximately a 4 mile by 2/3 mile strip of land running generally from the Samoa Bridge to the mouth of the Mad River slough between Humboldt Bay and the Pacific Ocean. The population base and water sewer infrastructure service area encompass a 1/3 mile by 2 1/3 mile section centrally located in the above mentioned strip (Figure 29.4).

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

- **Population Served**—Approximately 1000 people
- **Land Area Served**—Approximately 4.67 square miles
- **Value of Area Served**—The assessed value of improvements within the Manila voting district is \$26,716,890 (2007 certified roll, Humboldt County Assessor).

The assessed value of the property associated with the above improvements within the Manila voting district is \$10,999,025 (2007 certified roll, Humboldt County Assessor).

The assessed value of the property and improvements within the Manila voting district is \$37,715,915 (2007 certified roll, Humboldt County Assessor)

- **Land Area Owned**—Approximately 135 Acres
- **Critical Infrastructure and Equipment Owned:**
 - Water Delivery System and pressure control infrastructure, booster station (District Office) one (100,000 gallon) redwood storage reservoir one surge protector all associated appurtenances and delivery pipe.
 - Wastewater Treatment Plant, 311 lift stations associated with Septic Tank Effluent Pumping System, associated conveyance infrastructure. Constructed wastewater treatment facilities including: aeration ponds, oxidation ponds, rapid infiltration basins

and all related conveyance infrastructure. Laboratory, essential for wastewater treatment tasks. Backup generator for treatment plant.

- Backhoe, critical for repair of water delivery and sewage removal systems.
- Tractor
- 2 Service Vehicles, critical for communication and system evaluation in emergencies as well as for daily operations.
- Heavy Duty Septic Tank Pumper Truck
- **Total Value of Critical Infrastructure and Equipment—\$1,308,350**
- **Critical Facilities Owned:**
 - District Office (Water Delivery Booster Station and Surge Protection)
 - Service Yard
 - Wastewater Treatment Plant and Laboratory
 - Community Center
- **Total Value of Critical Facilities—\$5,523,720**
- **Current and Anticipated Service Trends**—Presently, the Manila Community Services District has 371 service connections. The Humboldt County General Plan predicts growth for the county to be approximately 4% every 5 years (<http://co.humboldt.ca.us/planning/Genplan/Framework/index.htm>). Historically, Manila has followed Humboldt County growth trends. Presently, growth in Manila is constrained by the limited capacity of the 100,000 gallon water storage reservoir. For our present population, 135,000 gallon capacity is desired. When this occurs, growth is anticipated to match or surpass county growth predictions. We presently have 61 unused service applications on file with the district. These are expected to become active within the next seven years. If these unused service applications are activated it will represent an 11.74% growth in 5 years; over double the County’s predicted growth.

12.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Severe Weather	023-17BEF-00	01/01/2006	\$4,000 reimbursement; \$19,180 actual. \$ value of damage unknown.
Earthquake	n/a	04/25-26/1992	Magnitude 7.1, 6.6 and 6.7 within 24 hour period. Private property damage occurred, but the total value is not known.

Table 12-1 lists all past occurrences of natural hazards within the jurisdiction.

12.4 HAZARD RISK RANKING

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Tsunami	36
2	Earthquake	54
3	Severe Storm	54
4	Flood	39
5	Wildfire	22
6	Drought	6
7	Landslide	6
8	Flood	6
9	Volcano	0

Table 12-2 presents the ranking of the hazards of concern.

12.5 APPLICABLE REGULATIONS AND PLANS

There are no existing applicable hazard mitigation laws, codes, ordinances or policies in effect by this district that could support or enhance the mitigation initiatives identified in this annex. However, Humboldt County planning employs the following: consideration of appropriate land use designations in order to limit the populace exposed to hazardous areas; 2) assessment and conditioning of development applications according to the hazards on a site; 3) policies tailored to specific hazardous conditions; and, 4) an action program to improve overall safety conditions within the County. Furthermore, the State of California Uniform Building Code (UBC) has very strict building codes that intend to keep residents and property safe during hazard events like earthquakes, wildfires, and floods, and the Humboldt County Planning Department enforces these standards during the building application process.

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

- None

12.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

TABLE 12-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	No	--	--
Storm Ready	No	--	--
Firewise	No	--	--
Tsunami Ready (if applicable)	Yes	--	--

Classifications under various community mitigation programs are presented in Table 12-3.

12.7 HAZARD MITIGATION ACTION PLAN

TABLE 12-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
M-1 Achieve Tsunami Ready Status for Manila							
New and Existing	EQ/T	6, 10, 12	Manila CSD	\$14,000 (Low)	NOAA grant (possible)	Short term Ongoing	Yes
M-2 Educate/Train Community regarding evacuation/preparedness							
New and Existing	EQ/T/SW	1,3,5,6,7, 12	Manila CSD	\$5,000 (Low)	Grants, HAF	Short term	Yes
M-3 Designate Evacuation Routes							
Existing	T	1,3,5,6,7, 10	Manila CSD	\$1,000 (Low)	RCTWG, Property taxes	Short term	Yes
M-4 Train Staff, Management, Board of Directors and Community Leaders in NIMS ICS							
Existing	All	all	Manila CSD/OES	\$4,000 (Low)	Grants, Loans	Short Term	Yes
M-5 Seismic and Tsunami retrofit the Community Center							
New and Existing	EQ/T	2,4	Manila CSD	\$500,000 (High)	FEMA HMGP and PDM	Long Term Depends on financing	Yes
M-6: Work with PGE to protect community from transmission lines /either automatically throw power to them or bury them							
New and Existing	EQ/T/SW	1,2,3,4,5,8, 10	MCSD/PGE	\$250,000 (Medium)	FEMA HMGP and PDM / PGE	Long Term Depends on financing	Yes

Table 12-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

12.8 PRIORITY OF RECOMMENDED INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
M-1	3	High	Low	Yes	No	Maybe	Medium
M-2	6	High	Low	Yes	Yes	Yes	Medium
M-3	6	High	Low	Yes	Yes	Maybe	Medium
M-4	5	High	Low	Yes	Yes	Maybe	Medium
M-5	2	High	High	Yes	yes	No	Medium
M-6	7	High	Medium	Yes	maybe	No	Medium

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 12-5 identifies the priority for each initiative.

12.9 ANALYSIS OF RECOMMENDED INITIATIVES

Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure						
Drought						
Earthquake	M1-M4		M1-M4			
Fish Losses						
Flood						
Landslide						
Severe Weather	M1-M4		M1-M4			
Tsunami	M1-M4		M1-M4			
Wildfire						

a. See Chapter 1 for description of mitigation types.

Table 12-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

12.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 12-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
M-1	✓	✓		Achieved, in process awaiting signage
M-2	✓			
M-3	✓			
M-4		✓		
M-5		✓		
M-6		✓		

Table 12-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

CHAPTER 13. MCKINLEYVILLE COMMUNITY SERVICE DISTRICT UPDATE ANNEX

13.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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13.2 JURISDICTION PROFILE

McKinleyville Community Services District is a small community located just north of the Mad River in Humboldt County. The District was formed on April 14, 1970 when the District residents voted for water and sewer services. The District serves an area of about 12,140 acres located between Little River on the north and the Mad River on the south. At later dates, drainage, street lights, parks and recreation and library services were added to the District's authorities. The District is governed by a five member publicly elected Board that meets monthly. The District purchases all drinking water from Humboldt Bay Municipal Water District. Wastewater is collected and treated within the District, then discharged to the Mad River in winter. During summer, treated effluent is recycled by pasture irrigation to ranch lands.

The District serves a population of about 15,997 with 5400 water services 4500 sewer services. Most water and sewer revenues are from monthly service charges. The District does receive a small percentage of property tax to fund the park and recreation department. Additionally, Proposition 218 assessment districts for the library, park and recreation, street lights and open space have been voted in by the area residents. McKinleyville is primarily a residential area with light commercial and no heavy industry.

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

- **Population Served**—15,997 as of 2012
- **Land Area Served**—12,140 acres
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$1,0452,763,764.00
- **Land Area Owned**—356 acres
- **Critical Infrastructure and Equipment Owned:**
 - Water Reservoirs: six water reservoirs with capacity of 5.25 MG;
 - Wastewater Treatment Plant: a thirty-acre site with six treatment ponds and headworks
 - Water Distribution System: 85 miles of pipe, an 18" transmission line under the Mad River, three reservoir sites and three water distribution pumping stations.
 - Sewer Collection system: 65 miles of sewer main and four sewer pumping stations.

- Wastewater Treatment Plant: a thirty-acre site with a control building and six-waste treatment ponds.
- Wastewater Disposal Areas: A 150-acre Ranch for wastewater disposal.
- Storm water Marsh System: a 10-acre storm water marsh consisting of four separate marshes.
- Street Lights (303).
- **Total Value of Critical Infrastructure and Equipment**—\$178.242 million
- **Critical Facilities Owned:**
 - Wastewater Treatment Facility
 - Main & Field Offices/Garages
 - Activities Center/Law Enforcement building/Library
 - Fischer Ranch/Barns
- **Total Value of Critical Facilities**—\$14.343 million
- **Current and Anticipated Service Trends**—During our last Hazard Mitigation Plan, we had been experiencing a 3% growth rate for sewer and water services over the prior 25 years. Growth during the last 5 years has leveled off, as McKinleyville builds out. The population growth is averaging around 1.8% annually but has been dropping steadily as more seniors and single parents move into our area. Expansion projects will include a new water reservoir, waste treatment plant upgrade, and upgraded pumping stations for water and sewer to accommodate the expected growth. We do expect growth to slow over the next 5 year cycle due to infrastructure costs and land availability.

13.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

TABLE 13-1. NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Winter storms, flooding, landslides, mud flows	DR-1044	1/9/1995	\$10,000.00 \$15 million countywide
Flooding, severe winter storms, and landslides	DR-1628	02/03/2006	\$85,000.00 \$20,208,206 countywide

Table 13-1 lists all past occurrences of natural hazards within the jurisdiction.

13.4 HAZARD RISK RANKING

TABLE 13-2. HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	48
2	Flood	45
3	Severe Weather	42
4	Tsunami	20
4	Landslide	18
5	Wildfire	12
6	Drought	9

Table 13-2 presents the ranking of the hazards of concern.

13.5 APPLICABLE REGULATIONS AND PLANS

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

- County of Humboldt Emergency Operations Plan
- MCSD Risk Control and Safety Plan (Emergency Operations Plan)
- Process Safety Management Plan (For Accidental release of Chlorination and Sulfur Dioxide)
- Hazard Communication Control Plan (Humboldt County Requirement)
- Security Vulnerability Assessment Template (EPA requirement)

13.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

TABLE 13-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	No	--	--
Storm Ready	No	--	--
Firewise	No	--	--
Tsunami Ready (if applicable)	No	--	--

Classifications under various community mitigation programs are presented in Table 13-3.

13.7 HAZARD MITIGATION ACTION PLAN

TABLE 13-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
MCS D- #1 Earthquake :Mitigate for loss of water transmission line under the Mad River							
Existing	Earthquake, Tsunami	1,2	MCS D	High	Capital reserves	Long-term, ongoing	Yes
MCS D -#2 Develop a local well for an alternative to the water supply that is currently vulnerable to damage from multiple hazard events, particularly where the existing water supply main runs under the Mad River							
New and Existing	Earthquake, Flood, Tsunami, Severe Weather	1,2,4,5	MCS D	High	Capital reserves	Short term, ongoing	Yes
MCS D# 3- Continue to support countywide initiatives identified in Volume 1 of this plan							
New and Existing	All Hazards	All Objectives	MCS D	Low	General fund	Ongoing	No
MCS D# 4- Continue to participate in and support the “emergency intertie” project that will provide redundant water supply transmission piping and availability under emergency circumstances such as water main failure caused by earthquake, flood, tsunami, or severe weather.							
New and Existing	Earthquake, Flood, Tsunami, Severe Weather	1,2,3,4	MCS D in partnership with Humboldt Bay Municipal Water District, and the Cities of Eureka and Arcata		State grant funds	Ongoing	No

Table 13-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

13.8 PRIORITY OF RECOMMENDED INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
MCSD-1	2	High	High	Yes	Yes	Yes	High
MCSD-2	4	High	High	Yes	Yes	No	Medium
MCSD-3	12	High	Low	Yes	No	Yes	High
MCSD-4	5	High	Low	Yes	Yes	No	High

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 13-5 identifies the priority for each initiative.

13.9 ANALYSIS OF RECOMMENDED INITIATIVES

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

a. See Chapter 1 for description of mitigation types.

Table 13-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

13.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 13-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
MCSD 1		✓		MCSD-1
MCSD 2	✓			This addressed flooding and river bank stabilization on Mad River east bank. MCSD, along with several other planning partners, worked to stabilize the Mad River’s eastern bank. The project used several different types of protection, including planting willow trees, rip rap, etc. This has helped to stabilize the eastern bank more than adequately.
MCSD 3		✓		MCSD-2

Table 13-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

CHAPTER 14. ORICK COMMUNITY SERVICE DISTRICT UPDATE ANNEX

14.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Karla Youngblood, OCSD Board Member
P O Box 63
Orick, CA 95555
Phone: 707-488-6605, or 707-845-0935
e-mail: orickcsd@gmail.com

Alternate Point of Contact

Neal Youngblood, Fire Captain
P O Box 224
Orick, CA 95555
Phone: 707-845-6753
e-mail: orickcsd@gmail.com

14.2 JURISDICTION PROFILE

Orick Community Services District is operated by a five-person elected Board of Directors. This Board will assume responsibility for the adoption and implementation of this plan. There are two part-time office staff, an office manager and an administrative assistant who take care of day-to-day operations. There is also a water operator who works mostly on an on-call basis. The district is funded by local taxes, water customer fees, and donations.

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

- **Population Served**—357 as of 2010 census
- **Land Area Served**—2.3 square miles
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is—\$47,650,000
- **Land Area Owned**—3.5 acres
- **Critical Infrastructure and Equipment Owned:**
 - (2) 100,000-gal tanks
 - pumps (xxx),
 - chlorinator,
 - 5 miles of pipeline,
 - 23 hydrants,
 - 132 hook ups,
 - Fire protection equipment
- **Total Value of Critical Infrastructure and Equipment**—\$4,062,000
- **Critical Facilities Owned:**
 - Office building, 25 x 30
 - Fire hall, 35 x 60
 - Community Hall 65 x 80

- **Total Value of Critical Facilities**—\$2,589,000
- **Current and Anticipated Service Trends**—
 - Potable water supply and distribution.
 - Fire Protection Services.
 - Latent Powers:
 - Sewage Collection

Anticipated changes in service trends:

- Provide wastewater
- Additional 100 unit motel and additional tourist ‘attractions’ through the Redwood Lodge Association developments

Based on the data tracked by the California Department of Finance, Unincorporated Humboldt County has experienced a relatively flat rate of growth. The overall population has increased only 4.1% since 2000 and has averaged 0.73% per year from 1990 to 2007. Considering these historical trends and future population projections produced by the state, anticipated development trends for the planning area are considered low, consisting primarily of residential development.

14.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

TABLE 14-1. NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Flooding, severe winter storms, and landslides	DR-1628	02/03/2006	\$20,208,206 countywide Minor damages to district facilities
1964 Flood	DR-183	12/24/1964	Losses in the millions countywide

Table 14-1 lists all past occurrences of natural hazards within the jurisdiction.

14.4 HAZARD RISK RANKING

TABLE 14-2. HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	54
2	Severe Weather	42
3	Tsunami	54
4	Drought	12
5	Flood	6
6	Wildfire	6
7	Landslide	6
8	Dam Failure	6
9	Fish Losses	0

Table 14-2 presents the ranking of the hazards of concern.

14.5 APPLICABLE REGULATIONS AND PLANS

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

- CEQA
- ESA for anadromous fish (4), spotted owl, marbled murrelet, snowy plover
- Coastal Zone—Coastal Commission
- Applicable county permits

14.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

TABLE 14-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	N/A	N/A	N/A
Storm Ready	Awareness level	N/A	Awareness level
Firewise	yes	2007	yes
Tsunami Ready (if applicable)	yes	2007	yes

Classifications under various community mitigation programs are presented in Table 14-3.

14.7 HAZARD MITIGATION ACTION PLAN

TABLE 14-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
O-1 —Provide public outreach for tsunami awareness							
New and Existing	Tsunami	3, 6, 7, 8, 10	Orick tsunami ready	\$500	NOAA, NPS	Short Term/Ongoing	Yes
O-2 —Seismic retro fit of water supply system							
Existing	EQ, Wildfire	1, 2, 4, 9	OCSD	\$10 mil	OCSD District funding, Hazard Mitigation Grant	Long term, Depends on financing	Yes
O-3 —Upgrade levees to 250 years flood Protection Level							
Existing	Flood	1, 2, 3, 9	Humboldt County	High	Benefit assessment, Army Corps of Engineers 205 funding, HMGP	Long term, Depends on financing	Yes
O-4 —Continue to support countywide initiatives identified in Volume 1 of this plan							
New and Existing	All Hazards	All Objectives	OCSD	Low	OCSD Funding	Ongoing	No

Table 14-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

14.8 PRIORITY OF RECOMMENDED INITIATIVES

TABLE 14-5. MITIGATION STRATEGY PRIORITY SCHEDULE							
Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
O-1	5	Medium	Low	Yes	No	Yes	High
O-2	4	High	High	Yes	Yes	No	Medium
O-3	4	High	High	Yes	Yes	No	Medium
O-4	12	Medium	Low	Yes	No	Yes	High

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 14-5 identifies the priority for each initiative.

14.9 ANALYSIS OF RECOMMENDED INITIATIVES

TABLE 14-6. ANALYSIS OF MITIGATION INITIATIVES						
Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	O-4		O-4		O-4	
Drought	O-4	O-2	O-4		O-4	O-2
Earthquake	O-4		O-4		O-4	
Fish Losses	O-4		O-4		O-4	
Flood	O-4	O-3	O-4		O-4	O-3
Landslide	O-4		O-4		O-4	
Severe Weather	O-4		O-4		O-4	
Tsunami	O-4		O-1, O-4		O-4	
Wildfire	O-4		O-4		O-4	

a. See Chapter 1 for description of mitigation types.

Table 14-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

14.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 14-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
O-1		✓		Orick Volunteer Fire Department is continuing to work with the school and community members to increase awareness of Tsunami escape routes. There was a successful siren test performed in March 2013.
O-2		✓		We have not been able to seek funding for retrofitting the water supply system.
O-3		✓		Orick is working with Humboldt County to bring the levees to the 250-year flood protection level.

Table 14-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

14.11 ADDITIONAL COMMENTS

Orick has a disproportionate number of people on public assistance. There are very few services to meet the needs of these individuals and yet, there is the perception that Humboldt County Social Service agencies continue to send them here.

CHAPTER 15.

REDWAY COMMUNITY SERVICE DISTRICT UPDATE ANNEX

15.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Business Manager
PO Box 40
Redway, CA 95560
Telephone: 707-923-3101
e-mail Address: rcsd@earthlink.net

Alternate Point of Contact

Board Chairman
PO Box 40
Redway, CA 95560
Telephone: 707-923-3101
e-mail Address: rcsd@earthlink.net

15.2 JURISDICTION PROFILE

Redway Community Services District was formed in 1965 from a private water system. In 1977 Redway CSD was reorganized to include the former Redway Sanitary District. The Eel River flows around the community from the southwest to the north. The eastern boundary is Highway 101 and State Park lands. The District is governed by a Board of 5 members of the community. The Board members are elected to four year terms, or can be appointed if there is no opposition. The Board of Directors meet once a month or more often as needed. Redway CSD is an enterprise district that bills for its services, monthly, for water and wastewater treatment. As a Special District RCSD also receives some property tax revenues that add to the operating funds. RCSD currently employs one Operations Manager and one Business Manager. In addition to the Operations Manager there are two licensed operators and one operator in training. There is also a customer service manager/billing clerk/office assistant.

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

- **Population Served**—1500 as of 2012/2013 SDRMA Insurance Renewal Questionnaire
- **Land Area Served**—Approximately 1280 acres are served by RCSD.
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$83,603,000.00.
- **Land Area Owned**—Redway CSD owns 8 small parcels within Redway, as well as many easements and the acreage for the wastewater treatment and disposal facilities.
- **Critical Infrastructure and Equipment Owned:**
 - RCSD water lines-25 miles of water mains
 - RCSD sewer mains/manholes 25 miles of sewer mains
 - 2001 Dodge Dakota
 - 1995 Nissan King Cab Pickup
 - 2001 Dodge Ram 2500
 - 2005 Pace American Trailer
 - John Deere 3520 Tractor w/loader, bucket and mower

- **Total Value of Critical Infrastructure and Equipment**—\$33,069,532.00
- **Critical Facilities Owned:**
 - Sewage Treatment Plant
 - Sludge Drying System
 - Storage Barn-Wastewater Plant
 - Lift Station-Azalea
 - Main Lift Station-Dogwood
 - Lift Station-Evergreen
 - Lift Station-Mill
 - Lift Station West Coast
 - Water Treatment Plant #1
 - Water Treatment Plant office
 - Booster Station-Meadows
 - Back wash supply tank
 - Water Intake Filters
 - Water Plant self-contained Stand By Generator
 - Water Tank #1 (small tank)
 - Water Tank #2 (New large tank)
 - Meadows Water Tank
 - Contact Chamber
 - Pump House ,Barnes Lane Warehouse
 - Finished Water pump station
 - Pressure Reduction vault (Oakridge)
 - Pressure Reduction Vault (orchard)
 - Business Office-contents
- **Total Value of Critical Facilities**—\$4,664,550.00
- **Current and Anticipated Service Trends**—RCSD has approximately 1% growth this year with a large annexed property adjacent which could accommodate substantial growth.

15.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Severe Winter Storms, Flooding Landslides, Mud Flow	1046	2/13/1995	\$253,551.00
Severe Winter Storms, Flooding, Landslides, Mud Flow	1628	12/17/2005	\$10,304.00

Table 15-1 lists all past occurrences of natural hazards within the jurisdiction.

15.4 HAZARD RISK RANKING

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	36
2	Flood	24
3	Slide	21
4	Storm	24
5	Fire	28
6	Drought	12

Table 15-2 presents the ranking of the hazards of concern.

15.5 APPLICABLE REGULATIONS AND PLANS

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

- Resolution No. 2007/2008-06
- Emergency Preparedness General Plan

15.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

	Participating?	Classification	Date Classified
Public Protection	No	--	--
Storm Ready	No	--	--
Firewise	No	--	--
Tsunami Ready (if applicable)	N/A	--	--

Classifications under various community mitigation programs are presented in Table 15-3.

15.7 HAZARD MITIGATION ACTION PLAN

TABLE 15-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
RCSD-1—Reinforce river bank at water treatment plant							
Existing	Flood and earthquake	1,2,9	RCSD	High	RCSD, Mitigation Grant funding	Long-term	Yes
RCSD-2—Community Outreach/education disaster preparedness							
New and Existing	All Hazards	6,7	RCSD	Low	RCSD	Ongoing	Yes
RCSD-3—Add alternate/Redundant Aerial crossing for effluent from Wastewater Treatment Plant							
Existing	EQ, Flood, Landslide	1,2,9	RCSD	High	RCSD, Mitigation Grant funding	Short term	Yes
RCSD-4—Fuel Load Reduction at Wastewater Treatment Plant							
New and existing	Wildfire	1,2,3,4,9	RCSD	Medium	RCSD, Mitigation Grant funding	Short term	No
RCSD-5—Enhance stormwater management capability within the district, with an emphasis on upgrades to existing stormwater conveyance system							
New and Existing	Severe Weather, Flood	1,2,3,8	RCSD	High	RCSD, Mitigation Grant funding	Long Term	Yes
RCSD-6—Continue to support countywide initiatives identified in Volume 1 of this plan							
New and existing	All Hazards	All Objectives	RCSD	Low	RCSD	Ongoing	No

Table 15-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

15.8 PRIORITY OF RECOMMENDED INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
RCSD-1	3	High	Med	Yes	Yes	Yes	High
RCSD-2	8	Low	Low	Yes	No	Yes	High
RCSD-3	3	High	Med	Yes	Yes	Yes	High
RCSD-4	3	Med	Med	Yes	Yes	Yes	High
RCSD-5	4	High	High	Yes	Yes	No	Medium
RCSD-6	12	Medium	Low	Yes	No	Yes	High

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 15-5 identifies the priority for each initiative.

15.9 ANALYSIS OF RECOMMENDED INITIATIVES

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

a. See Chapter 1 for description of mitigation types.

Table 15-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

15.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 15-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
RW1		✓		In Capital Improvement Plan
RW2		✓		Now Humboldt County Responsibility. Initiative carried over. Now initiative #RCSD-5
RW3		✓		Ongoing
RW4		✓		Project in Progress

Table 15-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

CHAPTER 16.

WEOTT COMMUNITY SERVICE DISTRICT UPDATE ANNEX

16.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Name: Lou Iglesias
Title: Director
Mailing address: P.O. Box 218,
Weott, CA 95571
Telephone #:946-2643
E-mail Address: dogwood62@att.net

Alternate Point of Contact

Name: Barbara Kennedy
Title: Director, Chairperson
Telephone: 946-2248
Email Address: bkenn202@att.net

16.2 JURISDICTION PROFILE

Weott Community Services District, located approximately 50 miles south of Eureka on State Highway 101, was incorporated within Humboldt County on September 28, 1965. The purpose of the district is to provide potable water, septic and fire protection to the community of Weott, population of about two hundred eighty eight residents. The district has adopted authority and is governed by five elected board members. This board will assume responsibility for the adoption and implementation of this plan. They are Chair, Barbara Kennedy, and Directors, Lou Iglesias, Jeff and Bonnie O'Neil. The Board meets at Weott Community Center every fourth Tuesday of the month. The District has one part time employee, Christine Conn, General Manager. The Operations and Maintenance of both water treatment plant and wastewater plant are contracted with Hank Brenard Environmental Consultants, FPC. The Fire Department is managed by Volunteer Chief Kim Frame who supervises an eight member volunteer firefighting staff, and manages operations, administration, training and maintenance of the fire station, fire engine and rescue vehicle.

Along with the fire department, the district operates and maintains a water system consisting of source springs, well, water treatment plant; transmission lines a septic wastewater plant leach field, lift station and community center. The operations of the district are funded by monthly fees levied on each parcel service hook up within the Weott service area. According to recent Humboldt County Planning data, Weott Community Services District boundary is three hundred sixteen acres. Additionally, the response area for the fire department is slightly over 26,000 acres. Geographically, Weott is centered within Humboldt Redwoods State Park. The Eel River is the District's western boarder and has historically flooded the district dramatically changing the footprint of a once thriving logging town. Currently the district services about one hundred and twenty seven users which include Agnes Johnson primary school, Cal Fire Weott Station, two Churches, Humboldt Redwoods State Park campground and US Post Office 95571. The last commercial retail establishment closed December 2006.

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

- **Population Served**—288 as of 2010 US Census Data
- **Land Area Served**—Weott Community Services District boundary is 316 acres. The response area for the fire department is slightly over twenty six thousand acres.
- **Value of Area Served**—The secured value is \$17,949,304.00 and the unsecured value is \$269,350.00

- **Land Area Owned**—approximately 3 acres: sites of water purification plant, site of sewer plant, site of A & B water tanks and the Weott Community Center
- **Critical Infrastructure and Equipment Owned:**
 - Fire Equipment
 - 2005 Kenworth Fire Engine
 - Chevrolet Suburban Emergency Light Rescue Vehicle
 - Biofilters & Fittings
 - Sodium Hypochlorite Feed Equipment
 - Submersible Pumps (4)
 - Emergency Onan Generator
 - John Deere Generator 8-KW
 - Pressure Filtration System
 - Electrical Transfer Switches
 - Office Equipment
- **Total Value of Critical Infrastructure and Equipment**—\$2,958,000.00
- **Critical Facilities Owned:**
 - WVFD Fire House
 - Sewerage Treatment Plant
 - Water Treatment Plant
 - Storage Tank “A”
 - Storage Tank “B”
 - Milligan Community Center
 - Water Collection System
 - Water Transmission System
 - Sewerage Collection System
 - Leach Field System
- **Total Value of Critical Facilities**—\$18,218,654.00
- **Current and Anticipated Service Trends**—We currently serve approximately one hundred and thirty accounts which include single family dwellings, a Cal Fire station, a California Department of Parks and Recreation camping facility, two non-operational commercial facilities, District facilities and an elementary school. We do not anticipate significant growth of services in the near future. Our priorities are to replace old and deteriorating components of our water system.

16.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Severe winter storms, flooding	DR-1203	2/9/1998	\$5,000.00
Storm	NA	12/13/2002	\$5,000.00
Storm	NA	12/17/2005	\$5,000.00

Table 16-1 lists all past occurrences of natural hazards within the jurisdiction.

16.4 HAZARD RISK RANKING

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Severe Weather	48
2	Earthquake	48
3	Flood	36
4	Landslide	36
5	Wildfire	36
6	Drought	9
7	Tsunami	0
8	Dam Failure	0
9	Other Hazards of Concern	0

Table 16-2 presents the ranking of the hazards of concern.

16.5 APPLICABLE REGULATIONS AND PLANS

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

- Weott Community Services District Ordinances and By-Laws; Gives the authority to the District to administer and implement policy to develop and maintain services to the Community of Weott.

16.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

	Participating?	Classification	Date Classified
Public Protection	Yes	8/9	2012
Storm Ready	No	N/A	N/A
Firewise	Yes	Unknown	Unknown
Tsunami Ready (if applicable)	No	N/A	N/A

Classifications under various community mitigation programs are presented in Table 16-3.

16.7 HAZARD MITIGATION ACTION PLAN

TABLE 16-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
WCSD#7 Replacement of 600 feet of “A” line under South Fork Eel River							
Yes	SW, F, LS, EQ	All Objectives	WCSD	\$250,000	California Department of Public Health, CA Prop 84	11/2013 Short Term	No
WCSD#8 Replacement of 90,000 gallon Water Storage Tank							
Yes	LS, EQ	1,2,3,4	WCSD	\$186,000	Prop 50, District Funds, FEMA hazard mitigation grant	Short Term	Yes
WCSD#2 Upgrade/Replace Water Treatment Plant and Transmission lines							
Yes	EQ, LS	1,2,3	WCSD	\$2,500,000	Prop 50, District Funds, FEMA hazard mitigation grant	Long Term	Yes
WCSD#3 Develop Back Up Water Source							
No	EQ, LS	1,2,3	WCSD	\$75,000	Prop 50, District Funds, Government grant/loan	Long Term	Yes
WCSD#5 Establish “Defensible” space Among critical facilities							
Yes	WF, SW Drought	1,2,3	WCSD	\$3,000	Self-Funded	Ongoing/ Long Term	Yes
WCSD#6 Support countywide initiatives identified in the HCAHMP							
Yes	All Hazards	All Objectives	WCSD	Low	Funded through existing/ ongoing programs	Short Term/ ongoing	Yes
WCSD#4 Retrofit Community Hall							
Yes	EQ, F, SW	1,2	WCSD	High	Prop 50, District Funds, Government grant/loan	Long Term	Yes

Table 16-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

16.8 PRIORITY OF RECOMMENDED INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
WCSD#7	All	High	High	Yes	Yes	No	High
WCSD#8	All	High	High	Yes	Yes	No	High
WCSD#2	All	High	High	Yes	Yes	No	High
WCSD#3	All	High	High	Yes	Yes	No	High
WCSD#5	All	High	Low	Yes	No	Yes	High
WCSD#6	All	High	Low	Yes	No	Yes	High
WCSD#4	All	High	High	Yes	Yes	No	High

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 16-5 identifies the priority for each initiative.

16.9 ANALYSIS OF RECOMMENDED INITIATIVES

Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	WCSD 6	WCSD 6	WCSD 6	WCSD 6	WCSD 6	WCSD 6
Drought	WCSD 5,6	WCSD 5,6	WCSD 5,6	WCSD 5,6	WCSD 5,6	WCSD 5,6
Earthquake	WCSD 7,8, 2, 3, 6, 4	WCSD 7,8, 2, 3, 6, 4	WCSD 7,8, 2, 3, 6, 4	WCSD 7,8, 2, 3, 6, 4	WCSD 7,8, 2, 3, 6, 4	WCSD 7,8, 2, 3, 6, 4
Flood	WCSD 7,6,4	WCSD 7,6,4	WCSD 7,6,4	WCSD 7,6,4	WCSD 7,6,4	WCSD 7,6,4
Landslide	WCSD 7,8, 2, 3, 6	WCSD 7,8, 2, 3, 6	WCSD 7,8, 2, 3, 6	WCSD 7,8, 2, 3, 6	WCSD 7,8, 2, 3, 6	WCSD 7,8, 2, 3, 6
Severe Weather	WCSD 4,5	WCSD 4,5	WCSD 4,5	WCSD 4,5	WCSD 4,5	WCSD 4,5
Tsunami	WCSD 6	WCSD 6	WCSD 6	WCSD 6	WCSD 6	WCSD 6
Wildfire	WCSD 5,6	WCSD 5,6	WCSD 5,6	WCSD 5,6	WCSD 5,6	WCSD 5,6
Other Hazards of Concern	WCSD 6	WCSD 6	WCSD 6	WCSD 6	WCSD 6	WCSD 6

a. See Chapter 1 for description of mitigation types.

Table 16-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

16.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 16-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
WCSD-1	✓			Project completed using District funds. Cost of project was lowered by utilizing district personnel and acquiring used meters from the City of Rio Del, CA
WCSD-2		✓		
WCSD-3		✓		
WCSD-4		✓		
WCSD-5		✓		

Table 16-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

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

Most future needs have been identified and posted. Any further listing for this cycle will depend on future hazard conditions.

16.12 ADDITIONAL COMMENTS

The difficulty to implementing our goals will be lessened with continued diligence for the safety and well-being of our community and cooperation with our neighbors both local and countywide.

CHAPTER 17. WESTHAVEN COMMUNITY SERVICE DISTRICT ANNEX

17.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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Alternate Point of Contact

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e-mail
sjordan.wcsd@suddenlinkmail.com

Address:

Address:

17.2 JURISDICTION PROFILE

The Westhaven Community Services District, located three miles south of the City of Trinidad, is a special-purpose district created in 1987 to provide domestic water service to that portion of the unincorporated community of Westhaven / Moonstone previously served by the Westhaven Mutual Water Company. Due to limited water source capacity the District's designated service area has not increased since formation. The District currently supplies 205—210 active service connections and an estimated population of 490. The District staff includes one full-time position and two part-time positions.

The District is governed by a five-member elected Board of Directors. The board assumes responsibility for adoption of this plan; the General Manager will oversee its implementation.

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

- **Population Served**—490 estimated as of January 2013
- **Land Area Served**—0.60 square miles
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$56,000,000
- **Land Area Owned**—21 acres
- **Critical Infrastructure and Equipment Owned:**
 - 3 Surface Water Collection Structures \$30,000
 - ¼ mi. Supply Transmission Pipeline \$20,000
 - 6 Supply Transmission Valves \$1,800
 - 1 80 GPM Slow Sand Filter \$150,000
 - 2 500,000 gallon Back-up Reservoirs \$100,000
 - 1 100' deep Groundwater Well \$5,000
 - 2 Chlorination / Treatment Facilities \$1,500
 - 1 Booster Pumping Station \$6,000
 - 1 Pressure Reducing Station \$10,000

- 1 100,000 gallon Water Tank \$150,000
- Treatment Plant Yard Piping \$10,000
- 6 Treatment Plant Yard Valves \$1,800
- 7 Miles of Water Mains \$1,500,000
- 70 Distribution System Valves \$28,000
- 8 ACV Valves \$1,000
- 2 Master Meters \$1,500
- 1 Flushing / Hydrant Meter \$1,100
- 224 Residential Meters \$20,000
- 1 Service Truck \$15,000
- **Total Value of Critical Infrastructure and Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$2,052,700
- **Critical Facilities Owned:**
 - 1 Maintenance Shop \$30,000
 - 1 Chlorinator / Booster Pump Shed \$10,000
 - 1 Chlorinator / Calcite Filter Shed \$10,000
 - 1 Business Office (rented) \$20,000
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$70,000
- **Current and Anticipated Service Trends**—The Westhaven CSD currently provides residential water service to an estimated population of 490. Due to limited water source capacity no change is anticipated.

17.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

TABLE 17-1. NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Wind / Power Outage		11/20/2012	N/A
Wind / Power Outage		11/05/2011	N/A
Wind / Power Outage		05/01/2011	N/A
Wind / Power Outage		03/02/2011	N/A
Wind / Power Outage		04/09/2010	N/A
Wind / Power Outage		01/17/2010	N/A
Wind / Power Outage		01/09/2010	N/A
Wind / Power Outage		01/04/2008	N/A
Wind / Power Outage		12/27/2006	N/A
Wind / Power Outage		12/31/2005	N/A
Wind / Power Outage		11/07/2002	N/A
Wind / Power Outage		02/14/2000	N/A
Wind / Power Outage		03/04/1996	N/A
Wind / Power Outage		12/11/1995	N/A
Freezing		12/20/1990	N/A
Wind / Power Outage		02/17/1988	N/A

Table 17-1 lists all past occurrences of natural hazards within the jurisdiction.

17.4 HAZARD RISK RANKING

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Earthquake	54
2	Severe Storm	51
3	Drought	26
4	Wildland Fire	18
5	Landslide	11
6	Volcano (ash fall)	5
7	Dam Failure	0
8	Flood	0
9	Tsunami	0

Table 17-2 presents the ranking of the hazards of concern.

17.5 APPLICABLE REGULATIONS AND PLANS

There are no existing applicable hazard mitigation laws, codes, ordinances or policies in effect by this district that could support or enhance the mitigation initiatives identified in this annex. However, Humboldt County planning employs the following: consideration of appropriate land use designations in order to limit the populace exposed to hazardous areas; 2) assessment and conditioning of development applications according to the hazards on a site; 3) policies tailored to specific hazardous conditions; and, 4) an action program to improve overall safety conditions within the County. Furthermore, the State of California Uniform Building Code (UBC) has very strict building codes that intend to keep residents and property safe during hazard events like earthquakes, wildfires, and floods, and the Humboldt County Planning Department enforces these standards during the building application process.

17.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

	Participating?	Classification	Date Classified
Public Protection	No	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A
Tsunami Ready (if applicable)	No	N/A	N/A

Classifications under various community mitigation programs are presented in Table 17-3.

17.7 HAZARD MITIGATION ACTION PLAN

TABLE 17-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
WHCSD-1—Retrofit and repair water tank roof							
Existing	Earthquake Wildfire Drought	O1-O5	WCSD	\$150,000	District Funds, State Grant	Short Term	N/A
WHCSD-2—Upgrade / Retrofit water distribution system for earthquakes and landslides							
Existing	Earthquake Wildfire Landslide	O1-O5	WCSD	High	District Funds, HMGP Grants	Short Term	N/A
WHCSD-3—Install back-up generator at treatment plant							
New	Earthquake Severe Weather	O1-O5	WCSD	\$10,000	District Funds	Short Term	N/A
WHCSD-4—Adopt a long-term capital improvement plan.							
New and Existing	All Hazards	All	WCSD	Low	District Funds	Short Term	N/A
WHCSD-5—Continue to periodically update Emergency Operations Plan, including Recovery Operations.							
New and Existing	All Hazards	All	WCSD	Low	District Funds	Short Term	N/A
WHCSD-6—Support countywide initiatives identified in the County Hazard Mitigation Plan							
New and Existing	All Hazards	All	WCSD	Low	District Funds	Ongoing	N/A
WHCSD-7—Continue to support the implementation, monitoring, maintenance and updating of the Humboldt Operational Area Hazard Mitigation Plan							
New and Existing	All Hazards	All	District	Low	District Funds	Ongoing	N/A

Table 17-4 Table 17-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

17.8 PRIORITY OF RECOMMENDED INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
WHCSD-1	5	High	Medium	Yes	Yes	No	High
WHCSD-2	5	High	High	Yes	Yes	No	High
WHCSD-3	5	High	Low	Yes	No	Yes	High
WHCSD-4	9	High	Low	Yes	No	Yes	High
WHCSD-5	9	High	Low	Yes	No	Yes	High
WHCSD-6	12	High	Low	Yes	No	Yes	High
WHCSD-7	12	High	Low	Yes	No	Yes	High

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 17-5 identifies the priority for each initiative.

17.9 ANALYSIS OF RECOMMENDED INITIATIVES

TABLE 17-6. ANALYSIS OF MITIGATION INITIATIVES						
Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	WCSD-6, WCSD-7		WCSD-6, WCSD-7		WCSD-6, WCSD-7	
Drought	WCSD-6, WCSD-7		WCSD-6, WCSD-7		WCSD-6, WCSD-7	WCSD-1
Earthquake	WCSD-6, WCSD-7	WCSD-1, WCSD-2	WCSD-6, WCSD-7		WCSD-6, WCSD-7	WCSD-1, WCSD-2
Flood	WCSD-6, WCSD-7		WCSD-6, WCSD-7		WCSD-6, WCSD-7	
Landslide	WCSD-6, WCSD-7	WCSD-2	WCSD-6, WCSD-7		WCSD-6, WCSD-7	WCSD-2
Severe Weather	WCSD-6 WCSD-7	WCSD-3	WCSD-6 WCSD-7		WCSD-6, WCSD-7	WCSD-3
Tsunami	WCSD-6, WCSD-7		WCSD-6, WCSD-7		WCSD-6, WCSD-7	
Wildfire	WCSD-6, WCSD-7	WCSD-1 WCSD-2	WCSD-6, WCSD-7		WCSD-6, WCSD-7	WCSD-1

a. See Chapter 1 for description of mitigation types.

Table 17-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

CHAPTER 18. WILLOW CREEK COMMUNITY SERVICE DISTRICT UPDATE ANNEX

18.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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18.2 JURISDICTION PROFILE

In 1964 the Willow Creek Community Services District was incorporated. The original role of the District was to provide water and unify multiple small private water systems into one system that would serve the whole community. In the middle seventies the WCCSD entered into the role of recreation. Shortly after focusing on recreation the District proceeded with receiving Latin power for wastewater. The District is currently working on a study for a downtown wastewater system.

The District employs four full time employees the General Manager, Chief Operator, Office Manager and Operator II positions. During the summer months the district also hires one water tech, two recreation techs and one part time office/grant writer tech.

The WCCSD operates on a rate based financial structure with water and recreation fees. The District supplements income with rental and property based taxes.

The District is governed by five elected directors with who established policy and enacts ordinances. The Board directs the Manager to conduct the District's business within described guidelines. This Board will assume the responsibility for the adoption and implementation of this plan.

The community has 945 water service connections with a population base of 1,710. We are located in the Trinity River valley basin of eastern Humboldt County. Located on Hwy 299 and 96 from the Trinity County line to the east and three north on highway 96 toward Hoopa Valley Reservation. The District has over thirty square miles of water shed to the west of town on the Willow Creek.

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

- **Population Served**—1,710 as of 2010 US Census
- **Land Area Served**—3700 acres
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$300,000,000.
- **Land Area Owned**—50 + A
- **Critical Infrastructure and Equipment Owned:**
 - Water Treatment and Distribution System

- 30 acres Parks
- Campground
- Six Rivers Community Center
- Office
- Museum
- **Total Value of Critical Infrastructure and Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$30,000,000.
- **Critical Facilities Owned:**
 - Treatment Plant
 - Water Tanks
 - Wells
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$20,000,000.
- **Current and Anticipated Service Trends**—Slow growth of about 1 percent

18.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

TABLE 18-1. NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
1964 500 yr. flood Trinity River	N/A	12/25/1964	Widespread tens of millions
Trinity river flooding	8620704	1/8/1973	Roads and Infrastructure
Drought	N/A	1977	FMHA Drought relief \$ 200,000
Winter weather flooding	68294	2/14/1992	Road drop out FEMA \$30,000
Winter storm /2005	404956	12/31/2005	Loss of Distribution Main \$40,000

Table 18-1 lists all past occurrences of natural hazards within the jurisdiction.

18.4 HAZARD RISK RANKING

TABLE 18-2. HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Wildfire	27
2	Earthquake	12
3	Flood	12
4	Severe Storm	12
5	Dam Failure	6
6	Drought	3
7	Landslide	3
8	Volcanic Ash Fall	3
9	Tsunami	0

Table 18-2 presents the ranking of the hazards of concern.

18.5 APPLICABLE REGULATIONS AND PLANS

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

- District approved ten year CIP plan 2012-2022 by District Board.

18.6 COMMUNITY MITIGATION PROGRAM CLASSIFICATIONS

TABLE 18-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	No	--	--
Storm Ready	No	--	--
Firewise	Yes	Firewise	12/2010
Tsunami Ready (if applicable)	No	--	--

Classifications under various community mitigation programs are presented in Table 18-3.

18.7 HAZARD MITIGATION ACTION PLAN

TABLE 18-4. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
WCCSD-1 —Continue to support countywide initiatives identified in Volume 1 of this plan.							
New and Existing	All Hazards	All Objectives	WCCSD	Low	WCCSD general Fund	Ongoing	Yes
WCCSD-2 —Construct Stormwater Interceptor							
New and Existing	Flood, Severe Weather	1,2,3,4	CSD	High	Prop 84/Match	August 2013	No
WCCSD-3 —Retrofit Bussell water storage tank							
Existing	Flood, Wildfire, Earthquake, Landslide	1,2,3,4	CSD	High	Agency	Short-term	No
WCCSD-4 —Willow Tower Tanks Renovation							
Existing	Flood, Wildfire, Earthquake, Landslide	1,2,3,4	CSD	High	Agency	Short term	No
WCCSD-5 —Retrofit Brannon Mtn. Water Tank							
Existing	Flood, Wildfire, Earthquake, Landslide	1.2.3.4	CSD	High	Agency, Grant	Long-term	No
WCCSD-6 —Hwy 299 Dist. Ln. Replacement							
Existing	Flood, Wildfire, Earthquake, Landslide	1,2,3,4	CSD	High	Agency, Grant	Long term	No

Table 18-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan.

18.8 PRIORITY OF RECOMMENDED INITIATIVES

TABLE 18-5. MITIGATION STRATEGY PRIORITY SCHEDULE							
Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority ^a
WCCSD-1	12	Medium	Low	Yes	No	Yes	High
WCCSD-2	4	High	High	Yes	Yes	Yes	High
WCCSD-3	4	High	High	Yes	Yes	Yes	High
WCCSD-4	4	High	High	Yes	Yes	Yes	High
WCCSD-5	4	High	High	Yes	Yes	No	Medium
WCCSD-6	4	High	High	Yes	Yes	No	Medium

a. See Chapter 1 for definitions of high, medium and low priorities.

Table 18-5 identifies the priority for each initiative.

18.9 ANALYSIS OF RECOMMENDED INITIATIVES

TABLE 18-6. ANALYSIS OF MITIGATION INITIATIVES						
Hazard Type	Initiative Addressing Hazard, by Mitigation Type ^a					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	WCCSD-1	--	WCCSD-1	--	WCCSD-1	--
Drought	WCCSD-1	--	WCCSD-1	--	WCCSD-1	--
Earthquake	WCCSD-1	WCCSD-3, WCCSD-4, WCCSD-5, WCCSD-6	WCCSD-1	--	WCCSD-1	--
Flood	WCCSD-1	WCCSD-3, WCCSD-4, WCCSD-5, WCCSD-6	WCCSD-1	--	WCCSD-1	WCCSD-2
Landslide	WCCSD-1	WCCSD-3, WCCSD-4, WCCSD-5, WCCSD-6	WCCSD-1	--	WCCSD-1	--
Severe Weather	WCCSD-1	--	WCCSD-1	--	WCCSD-1	WCCSD-2
Tsunami	WCCSD-1	--	WCCSD-1	--	WCCSD-1	--
Wildfire	WCCSD-1	WCCSD-3, WCCSD-4, WCCSD-5, WCCSD-6	WCCSD-1	--	WCCSD-1	--

a. See Chapter 1 for description of mitigation types.

Table 18-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

18.10 STATUS OF PREVIOUS PLAN INITIATIVES

TABLE 18-7. PREVIOUS ACTION PLAN IMPLEMENTATION STATUS				
Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
WCCSD-1	✓			Replace single tank with two at Panther site, doubling capacity and fire protection
WCCSD-2	✓			Replace redwood 100,000 with steel 110,000 gal. tank at Hodgson site
WCCSD-3	✓			Replace corroded steel tank with new 150,000 gal. Bigfoot Site

Table 18-7 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.