

Attachment 1

McKinleyville Community Services District Jurisdictional Annex of the Humboldt Operational Area Hazard Mitigation Plan Update

Chapter 13.

MCKINLEYVILLE COMMUNITY SERVICES 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 \$1,045,763,764.00
- **Land Area Owned:** 356 acres
- **Critical Infrastructure and Equipment Owned:**
 - I. Water Reservoirs: six water reservoirs with capacity of 5.25 MG;
 - II. Wastewater Treatment Plant: a thirty-acre site, control building, with six treatment ponds and headworks
 - III. Water Distribution System: 85 miles of pipe, an 18” transmission line under the Mad River, three reservoir sites and three water distribution pumping stations.
 - IV. Sewer Collection system: 65 miles of sewer main and four sewer pumping stations.
 - V. Wastewater Disposal Areas: A 150-acre Ranch for wastewater disposal.
 - VI. Storm water Marsh System: a 10-acre storm water marsh consisting of four separate marshes.
 - VII. Street Lights (303)
- **Total Value of Critical Infrastructure and Equipment:** \$178.242 million
- **Critical Facilities Owned:**
 - I. Wastewater Treatment Facility
 - II. Main & Field Offices/Garages
 - III. Activities Center/Law Enforcement building/Library
 - IV. 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	2/3/2006	\$85,000.00 \$20,208,206.00 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
5	Landslide	18
6	Wild fire	12
7	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?
MCSD-#1	EARTHQUAKE	Mitigate for loss of water transmission line under the Mad River					

Existing	EQ, Tsunami	1,2	MCSD	High	Capital Reserves	Long-term, ongoing	Yes
MCSD	ALL HAZARDS	Water well for backup system supply					
New and existing	All Hazards	1,2,4,5	MCSD	High	Capital Reserves	Short-term, ongoing	Yes
MCSD	ALL HAZARDS	Continue to support countywide initiatives identified in Volume 1 of this plan					
New and Existing	All Hazards	All Objectives	MCSD	Low	General Fund	Ongoing	No

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

13.8 PRIORITY OF RECOMMENDED INITIATIVES

TABLE 13-5 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?	
MCSD-1	2	HIGH	HIGH	YES	YES	YES	HIGH
MCSD-2	4	HIGH	HIGH	YES	YES	NO	MED
MCSD-3	12	HIGH	LOW	NO	NO	YES	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

TABLE 13-6						
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS						
	Initiative Addressing Hazard, by Mitigation Type*					
HAZARD TYPE	1.PREVENTION	2.PROPERTY PROTECTION	3.PUBLIC EDUCATION AND AWARENESS	NATURAL RESOURCE PROTECTION	EMERGENCY SERVICES	STRUCTURAL PROJECT
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
FISH LOSSES	MCSD-3	MCSD-2	MCSD-3		MCSD-3	
FLOOD	MCSD-3	MCSD-2	MCSD-3		MCSD-3	
LANDSLIDE	MCSD-3	MCSD-2	MCSD-3		MCSD-3	
SEVERE WEATHER	MCSD-3	MCSD-2	MCSD-3		MCSD-3	
TSUNAMI	MCSD-3	MCSD-2	MCSD-3		MCSD-3	MCSD-1
WILDFIRE	MCSD-3	MCSD-2	MCSD-3		MCSD-3	
*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 Status				
Action #	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	Comments
MCSD-1		X		MCSD-1
MCSD-2	X			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		X		