

Table 1-14. Hazard Mitigation Action Plan Matrix

Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	TimeLine
<b>Action HC-1</b> —Develop countywide Evacuation Plan, including maps, community profiles, and a multijurisdictional response plan covering the Humboldt Operational Area.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, tsunami, wildfire						
Existing	2, 3, 5, 6, 7, 9, 12	Humboldt County OES	Cal Fire, USFS, cities, fire agencies	Low	Staff time, General funds, HMGP, PDM, FMA	Short-term
<b>Action HC-2</b> — Complete Disaster Recovery Plan in collaboration with Operational Area jurisdictions, communities, and businesses.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
New and Existing	1, 2, 8, 9, 12	Humboldt County OES	County departments, cities, businesses	Medium	Staff Time, General Funds, HMGP, EMPG, HSGP	Short-term
<b>Action HC-3</b> —Implement priority recommendations from the CWPP, including, but not limited to, the management of hazardous vegetation along county roads and associated equipment; programs to support defensible space management and hardening homes against wildfire; and landscape scale fuels reduction in priority areas.						
<i>Hazards Mitigated:</i> Wildfire, landslide						
New and existing	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Humboldt County Fire Safe Council/Public Works	Agency partners such as CAL FIRE and Six Rivers National Forest	High	Staff Time, County Roads funds and grants	Ongoing
<b>Action HC-4</b> —Replace existing tsunami sirens; continue to develop, implement, and maintain redundant tsunami warning systems.						
<i>Hazards Mitigated:</i> Tsunami						
New and Existing	2, 3, 5, 6	Humboldt County OES	NOAA, Public Works, cities, special districts	Low	Staff Time, General Funds	Ongoing
<b>Action HC-5</b> —Retain dedicated GIS technical assistance for various all-hazards and hazard-specific planning efforts, including evacuation, emergency operations, debris management, mass care, and public alert & warning.						
<i>Hazards Mitigated:</i> All hazards						
New and Existing	2, 4, 5, 6, 7, 9, 12	Planning & Building	Public Works, County OES	Medium	HMGP, PDM	Long-term
<b>Action HC-6</b> — Support County radio infrastructure upgrade, replacement of failing radio equipment, and emergency backup power at tower sites.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
New and Existing	1, 2, 4, 5	County Administrative Office	Public Works, Sheriff's Office	High	General funds, HMGP, PDM	Long-term
<b>Action HC-7</b> —Develop, implement, and support public outreach and education campaigns to reduce community risk and promote resilience.						
<i>Hazards Mitigated:</i> Earthquake, flood, severe weather, tsunami, wildfire						
New and existing	3, 6, 8	Humboldt County OES	Fire Safe Council, Redwood Coast Tsunami Work Group	Low	HMGP, General funds, fire grants	Ongoing
<b>Action HC-8</b> —Develop countywide, all-hazards Debris Management Plan in collaboration with responsible Operational Area entities.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
New and existing	1, 2, 4, 5, 8, 9	Public Works	County OES, cities, special districts	Medium	HMGP, General funds, staff time	Short-term
<b>Action HC-9</b> —Complete feasibility study and develop plan for a new County Emergency Operations Center, and continue to develop and acquire mobile technology to augment existing capacity.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
New and existing	1, 2, 4, 5	County OES	Sheriff's Office	High	HMGP, General funds, HSGP	Long-term

Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	TimeLine
<b>Action HC-10</b> —Acquire and install emergency backup power at critical facilities lacking existing emergency power.						
<i>Hazards Mitigated:</i> Earthquake, flooding, landslide, severe weather, tsunami, wildfire						
Existing	1, 2, 3, 4, 5	County OES	Sheriff's Office, fire agencies, Public Works	Medium	HMGP, General funds	Short-term
<b>Action HC-11</b> —Support development and construction of vertical tsunami evacuation structures in high-risk tsunami zones where timely evacuate on foot is not possible.						
<i>Hazards Mitigated:</i> Tsunami						
New	2, 3, 4, 5, 8	Samoa Peninsula Fire Protection District	County Planning & Building	High	HMGP	Long-term
<b>Action HC-12</b> — Support countywide mass care capacity development and planning, including identification and inspection of facilities and sites, and acquisition of community-based supply caches to increase resilience in high-risk areas.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, tsunami, wildfire						
New	3, 4, 5, 6	County Health & Human Services	County OES, County Public Health, CA Social Services and Public Health	Medium	HMGP, California Social Services, PH grants	Ongoing
<b>Action HC-13</b> —Support development, training, and maintenance of community volunteer resources, including CERT, disaster animal response, and coordination with VOAD/COAD organizations (volunteer organizations active in disasters/community organizations active in disasters).						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, tsunami, wildfire						
New and existing	3, 5, 6	County OES	Humboldt CERT Coalition, California Volunteers, fire agencies, LE agencies	Medium	HMGP, California Volunteers	Long-term
<b>Action HC-14</b> — Identify priority locations for landslide mitigation projects along key access routes (such as Alderpoint Road, Wilder Ridge Road and Mattole/Bull Creek Road), as well as waterways (such as upstream of the City of Rio Dell's water supply intake on the Eel River). Move forward on implementing the most appropriate mitigation for each location.						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, tsunami, wildfire						
New and existing	1, 2, 3, 7, 8, 9, 10, 11	County Public Works	City of Rio Dell and Trinidad and other impacted service districts and partners depending on the area	Medium	PDM Grant, HMGP, General Fund, Road Funds	Long-term
<b>Action HC-15</b> —Identify priority road and bridge hazard mitigation projects and develop collaborative partnerships for implementation. Candidates for priority projects include (but are not limited to): Blue Slide Road (Price Creek), Elk River Road (Elk River), South Jetty Road, Old Arcata Road (Jacoby Creek), Meridian Road (Reas Creek), Hookton Road (Salmon Creek), Upper and Lower Cappell Roads near Hoopa (culvert needs), Ambrosini Lane (Williams Creek), King Salmon Avenue (Humboldt Bay), and roadways and culverts in communities such as Redway, Shelter Cove, and Westhaven. Move forward on implementing the most appropriate mitigation for each location.						
<i>Hazards Mitigated:</i> Dam Failure, Earthquake, Landslide, Severe Weather, Tsunami, Wildfire						
New and existing	2, 3, 4, 5, 7, 8, 11	County Public Works	Cities of Ferndale and Rio Dell, impacted service districts, and Humboldt County Association of Governments	Medium	General Fund, PDM Grant, HMGP, Other State Grants, State Transportation Improvement Program	Long-term

Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	TimeLine
<b>Action HC-16</b> — Identify projects for sediment retention and/or floodplain connectivity where excessive sediment is a primary cause of flooding (restore natural floodplain processes) and secure property interests (fee title or easement) necessary for implementation. <i>Hazards Mitigated:</i> Flooding						
New and existing	2, 3, 9, 10	County Public Works	none	High	PDM/HMGP Grant, State Water Bond funding, other Grants.	Long-term
<b>Action HC-17</b> — Secure funding and authorization to include seismic upgrades to planned major repairs of County buildings, especially buildings critical to emergency response and recovery (including designs and feasibility studies associated with the construction project). <i>Hazards Mitigated:</i> Earthquake						
Existing	1, 2, 4, 7, 11	County Public Works	Other County departments as applicable	Medium	General Fund, PDM, HMGP	Long-term
<b>Action HC-18</b> — Protect, relocate, and/or develop mobilization plans for PW maintenance yards with exposure to hazards (such as the heavy equipment and motor-pool facilities on Jacobs Ave.). <i>Hazards Mitigated:</i> All Hazards						
Existing	1, 2, 3, 4, 8, 12	County Public Works	None	Medium	General Fund, Grants	Long-term
<b>Action HC-19</b> — Upgrade federal flood control projects to meet current FEMA and Army Corps of Engineers standards (Redwood Creek, Eel River, Mad River). <i>Hazards Mitigated:</i> Flood and Other Hazards (Fish Losses)						
Existing	2, 3, 6, 7, 8, 9, 10	County Public Works	City of Blue Lake, Orick Community Services District	Medium	General Fund, Grants (FEMA, Army Corps of Engineers)	Long-term
<b>Action HC-20</b> — Increase the current Benefit Assessment for County Service Area #4 to meet the rising cost of services. <i>Hazards Mitigated:</i> Wildfire						
New and Existing	3, 4, 5	County Administrative Office	County Public Works, County Planning and Building and CAL FIRE	Medium	County funds	Short Term
<b>Action HC-21</b> — Develop Sea Level Rise Adaptation Plans for hydrographic areas around Humboldt Bay using the framework currently being applied for the Eureka Slough hydrographic area. <i>Hazards Mitigated:</i> Flooding (Sea Level Rise)						
New and Existing	2, 3, 6, 7, 8, 9, 10	County Public Works	Cities of Eureka and Arcata, Humboldt County Association of Governments, and Caltrans	Med	State grants, Caltrans funding, Coastal Conservancy funding	Short Term
<b>Action HC-22</b> - Develop new land use policies and regulations to mitigate against all hazards. <i>Hazards Mitigated:</i>						
New and Existing	2, 3, 6, 7, 8, 9, 10, 11,	County Planning and Building	County Public Works, County, and CAL FIRE	Med	County funds, grants, state funding	Short Term
<b>Action HC-23</b> —Integration of LHMP, CWPP, General Plan Safety Element. <i>Hazards Mitigated:</i>						
New and Existing	2, 3, 6, 7, 8, 9, 10, 11,	County of Humboldt (County Planning and Building, Public Works, OES)	Cal OES, CAL FIRE	Med	County funds, grants, state funding	Short Term

Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	TimeLine
<b>Action HC-24</b> —Continue to maintain compliance and good standing under the National Flood Insurance Program. This will be accomplished through the implementation of floodplain management programs that, at a minimum, will meet the minimum requirements of the NFIP, which include the following: <ul style="list-style-type: none"> <li>• Enforcement of the adopted flood damage prevention ordinance,</li> <li>• Participating in floodplain identification and mapping updates, and</li> <li>• Providing public assistance/information on floodplain requirements and impacts</li> </ul> Hazards Mitigated: Flood, Dam Failure, Tsunami						
New and Existing	2, 3, 6, 7, 8, 9, 10, 11	Planning and Building	Public Works	Low	Funded through existing, ongoing programs	Short Term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

See the introduction to this volume for list of acronyms used here.

Table 1-15. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority <sup>a</sup>	Grant Pursuit Priority <sup>a</sup>
HC-1	7	High	Low	Yes	Yes	Partially	High	Yes
HC-2	5	Medium	Medium	Yes	Yes	Partially	Medium	No
HC-3	8	High	Medium	Yes	Yes	No	Medium	No
HC-4	4	High	Low	Yes	Yes	No	High	Yes
HC-5	7	Medium	Medium	Yes	Yes	Partially	Medium	No
HC-6	4	Medium	High	No	Yes	Partially	High	Yes
HC-7	3	High	Low	Yes	Yes	Partially	Medium	No
HC-8	6	Low	Medium	No	Yes	No	High	Yes
HC-9	4	High	High	Yes	Yes	No	Medium	No
HC-10	5	High	Medium	Yes	Yes	No	High	Yes
HC-11	5	High	High	Yes	Yes	No	Medium	Yes
HC-12	4	Medium	Medium	Yes	Unknown	No	Medium	No
HC-13	3	High	Medium	Yes	Unknown	Partially	Medium	Yes
HC-14	8	High	Medium	Yes	Yes	No	Medium	High
HC-15	7	High	Medium	Yes	Yes	No	Medium	High
HC-16	4	Medium	High	Yes	Yes	No	Low	Medium
HC-17	5	High	High	Yes	Yes	No	Medium	High
HC-18	6	Medium	Medium	Yes	Yes	No	Medium	Medium
HC-19	7	Medium	Medium	Yes	Yes	No	Medium	Medium
HC-20	3	Medium	Medium	Yes	No	Partially	High	Low
HC-21	7	Medium	High	No	Yes	No	Medium	Medium
HC-22	8	Medium	Medium	Yes	Yes	No	Medium	Medium
HC-23	8	Medium	Medium	Yes	Yes	No	Medium	Medium
HC-24	8	Medium	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.