

CHAPTER 3.5 CITY OF DUNSMUIR ANNEX

3.5.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
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3.5.2 JURISDICTION PROFILE

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

- **Date of Incorporation**—August 7, 1909
- **Current Population**—1,581 as of 2019 (Dept. of Finance)
- **Population Growth**— Consistent with the persistent and gradual reduction in population throughout much of the region since the 1980s, the City of Dunsmuir’s population decreased by approximately 4.2 percent, or by 69 persons, between 2010 and 2019. This trend is expected to continue over the next five years.
- **Location and Description**— The City of Dunsmuir is located at an average elevation of 2,289 feet above sea level in the Upper Sacramento River Canyon approximately 12 miles south of Mount Shasta (a dormant volcano with a height of 14,162 feet). The steep canyon walls around the City are heavily forested. Much of these lands are productive timberlands managed by the U.S. Forest Service or owned by private timber companies. Two major surface transportation facilities, Interstate 5 and the Union Pacific Railroad, share a corridor through the canyon and through the City of Dunsmuir. Box Canyon Dam on the Sacramento River (which impounds Lake Siskiyou) is located eight miles north and upstream of Dunsmuir..
- **Brief History**— During the 1820s, early European-American hunters and trappers passed through present-day Dunsmuir along the Siskiyou Trail. With the 1848 discovery of gold in California, traffic along the Trail increased considerably, eventually resulting in the first non-Native American settlement at Upper Soda Springs in north Dunsmuir in the early 1850s. Completion of the Central Pacific Railroad in 1887 brought commerce and growth to the region, and in 1909 the City incorporated. For many years, Dunsmuir served as the headquarters for the Southern Pacific Railroad’s Shasta Division. This led to Dunsmuir at one time being the most populous city in the County. Changes in the railroad industry in the 1950s and the collapse of the logging industry 1980s subsequently reshaped Dunsmuir as the population contracted and the economy shifted to tourism and service-based industries.

- **Climate**— The region experiences a moderate climate, with warm dry summers and cool wet winters. Most precipitation has historically fallen over a roughly eight-month period from October until June, with most snowfall occurring from November to March. The area receives an average of 58.35 inches of total annual precipitation and 54.8 inches of total average snowfall. Very little precipitation falls during the summer, with July receiving an average of 0.41 inch (Western Regional Climate Center 2019).
- **Governing Body Format**— The City uses a Council-Manager form of government. The City Council is comprised of five Council Members elected for four-year terms, with the Council annually appointing one of its Members to serve as Mayor. The City Manager is appointed by the City Council to administer city policy, oversee daily operations, including management of all city departments and contract services, and represent the City in its relations with other governmental agencies and the public. The City has one standing commission, the Planning Commission, and several standing and ad-hoc committees, including the Public Safety Committee and the Disaster Preparedness Advisory Committee. There are seven departments: Finance, Water, Wastewater, Public Works, Building, Planning, and Administration. The City is served by a semi-independent volunteer Fire Department comprised of three different governmental entities: City of Dunsmuir, Dunsmuir Fire Protection District, and Castella Fire Protection District. The City contracts with the Siskiyou County Sheriff's Office for law enforcement services.
- **Development Trends**—The small size of many parcels and the topographic constraints caused by slopes that often exceed 15 percent limit the sizes of residential and commercial structures that can be constructed. As a result, there are no large development projects in the community and the single-family dwelling is the most typical housing type available.

3.5.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 3.5-1 lists all past occurrences of natural hazards within the jurisdiction. Repetitive loss records are as follows:

- Number of FEMA Identified Repetitive Flood Loss Properties: 1
- Number of FEMA Identified Severe Repetitive Flood Loss Properties: 0
- Number of Repetitive Flood Loss Properties that have been mitigated: Unknown

3.5.4 HAZARD RISK RANKING

Table 3.5-2 presents the ranking of the hazards of concern.

3.5.5 CAPABILITY ASSESSMENT

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 3.5-3. The assessment of the jurisdiction's administrative and technical capabilities is presented in Table 3.5-4. The assessment of the jurisdiction's fiscal capabilities is presented in Table 3.5-5. Classifications under various community mitigation programs are presented in Table 3.5-6.

3.5.6 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 3.5-7 lists the initiatives that make up the jurisdiction's hazard mitigation plan. Table 3.5-8 identifies the priority for each initiative. Table 3.5-9 summarizes the mitigation initiatives by

hazard of concern and the six mitigation types. Due to the City's lack of inclusion in the County's 2012 hazard mitigation plan, it was not possible to integrate city-specific information, including mitigation actions, from that plan into the current plan. Nevertheless, the City used the best available data during development of the City's annex, and the City will continue to incorporate new information into the annex as it becomes available.

Part of the City of Dunsmuir's planning process was surveying the public about topics that are important to them and how they see the City changing in the next 25 years. Similar to the mapping exercise at a workshop, some of the questions were open ended and asked about areas and features of concern. Over half of the participants indicated that safety was in the top 3 topic areas of interest. Even more of the participants mentioned flooding, wildfires, or natural disasters as high concerns for the City. Other major themes that came out of the survey is the need to preserve the pristine environment surrounding the City and the sense of community that is felt in the area.

The information gathered from the survey is integrated into the mitigation strategy of the 2018 update of the LHMP.

The City General Plan which includes a Safety Element that will continue to collect input from the public. This information will be integrated into the Safety Element which is connected to the LHMP by state statute.

In addition to the General Plan process, the City will continually educate and engage the public in natural and man-made disaster planning with annual review of safety by the Planning Commission in a public meeting, publishing disaster related materials for the public, and engaging the public through public forums to address concerns.

National Flood Insurance Program

The City of Dunsmuir does participate in the National Flood Insurance Program (NFIP) that provides federally backed flood insurance in exchange for communities enacting floodplain regulations. Participation and good standing under NFIP are prerequisites to grant funding eligibility under the Robert T. Stafford Act. The County and most of the partner cities for this plan participate in the NFIP and have adopted regulations that meet the NFIP requirements. At the time of the preparation of this plan, all participating jurisdictions in the partnership were in good standing with NFIP requirements.

3.5.7 HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps for the Siskiyou County area are included in Volume 1 of this mitigation plan. These maps are based on the best available data at the time of the preparation of this plan and are considered adequate for planning purposes.

**TABLE 3.5-1.
NATURAL HAZARD EVENTS**

Type of Event	Date	Preliminary Damage Assessment
Heavy Rain/Avalanche	February 1902	No estimates available
Flood	January 1914	No estimates available
Flood	March 1916	No estimates available
Flood	February 27, 1940	No estimates available
Flood (DR-47)	December 21, 1955	No estimates available
Heavy Rain/Flood (DR-183)	December 24, 1964	No estimates available
Severe Storm/Flood (DR-412)	January 25, 1974	\$4.2 million
Severe Storm/Flood (DR-1155)	January 4, 1997	No estimates available

**TABLE 3.5-2.
HAZARD RISK RANKING**

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Wildfire	54
2	Severe Weather	33
3	Flood	24
4	Earthquake	18
5	Drought	18
6	Landslide	12
7	Volcano	12
8	Dam Failure	10

**TABLE 3.5-3.
LEGAL AND REGULATORY CAPABILITY**

ALL OF THESE CAPABILITIES MAY BE USED FOR MITIGATION ACTIVITIES IN THE FUTURE

	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Building Code	Y	N	N	Y	CA Building Code, Title 15, DMC, 2015
Zonings	Y	N	N	Y	Title 17, DMC, 2015
Subdivisions	Y	N	N	Y	Title 16, DMC 2015
Stormwater Management	Y	Y	N	Y	Clean Water Act
Post Disaster Recovery	N	N	N	N	
Real Estate Disclosure	Y	N	N	Y	CA Civil Code 1102
Growth Management	Y	N	N	Y	City of Dunsmuir General Plan (2006)
Site Plan Review	Y	N	N	N	Title 17, DMC, 2015
Special Purpose (flood management, critical areas)	Y	N	N	N	Title 19, DMC, 2015
Planning Documents					
General or Comprehensive Plan	Y	N	N	Y	12/15/2006, Resolution 2006-73
Floodplain or Basin Plan	N	N	N	Y	CVRWQCB Basin Plan
Stormwater Plan	N	Y	N	N	Clean Water Act, SB 790
Capital Improvement Plan	Y	N	N	N	5-year CIP for water, wastewater, and equipment.
Habitat Conservation Plan	N	N	N	N	
Economic Development Plan	N	N	N	N	
Emergency Response Plan	N	N	N	N	
Shoreline Management Plan	N	N	N	N	N/A
Post Disaster Recovery Plan	N	N	N	N	

**TABLE 3.5-4.
ADMINISTRATIVE AND TECHNICAL CAPABILITY**

ALL OF THESE CAPABILITIES MAY BE USED FOR MITIGATION ACTIVITIES IN THE FUTURE

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Y	City Planner (contract), City Engineer (contract)
Engineers or professionals trained in building or infrastructure construction practices	Y	City Engineer (contract), Public Works, Building Official (contract)
Planners or engineers with an understanding of natural hazards	Y	City Planner (contract), City Engineer (contract), Public Works, Building Official (contract)
Staff with training in benefit/cost analysis	Y	City Manager, Finance Director, City Engineer (contract), Public Works
Floodplain manager	Y	Building Official (contract)
Surveyors	Y	City Engineer (contract)
Personnel skilled or trained in GIS applications	N	City Engineer (contract), City Planner (contract)
Scientist familiar with natural hazards in local area	N	N/A
Emergency manager	Y	City Manager, Fire Chief
Grant writers	Y	City Manager, Finance Director, City Engineer (contract), City Planner (contract), Fire Chief

**TABLE 3.5-5.
FISCAL CAPABILITY**

ALL OF THESE CAPABILITIES MAY BE USED FOR MITIGATION ACTIVITIES IN THE FUTURE

Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Y
Capital Improvements Project Funding	Y
Authority to Levy Taxes for Specific Purposes	Y
User Fees for Water, Sewer, Gas or Electric Service	Y
Incur Debt through General Obligation Bonds	Y
Incur Debt through Special Tax Bonds	Y
Incur Debt through Private Activity Bonds	Y
Withhold Public Expenditures in Hazard-Prone Areas	N
State Sponsored Grant Programs	Y
Development Impact Fees for Homebuyers or Developers	N

TABLE 3.5-6. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	N	N/A	N/A
Building Code Effectiveness Grading Schedule	N	N/A	N/A
Public Protection	Y	3/3Y	ISO 08/01//2015
Storm Ready	N	N/A	N/A
Firewise	N	N/A	N/A

TABLE 3.5-7. HAZARD MITIGATION ACTION PLAN MATRIX						
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost ^a	Sources of Funding	Timeline
Initiative #DUN 1 —Develop an evacuation preparedness plan in cooperation with Siskiyou County Sheriff’s Office, Fire Safe Council(s), and other stakeholders.						
N/A	All	1,4,8,9	City	Medium	General Fund, Grants	Short Term
Initiative # DUN 2 —Develop educational materials regarding natural hazards, disaster preparedness planning, the city’s audible emergency warning system, and evacuation routes to inform and educate the community via the city website, library, community resource center, direct mailings, community meetings, and other forms of outreach.						
Existing	All	1,3,4,5,7,9	City	Medium	General Fund, Grants	Short Term
Initiative # DUN 3 —Inventory and assess condition of primary and secondary evacuation routes in the City and improve and maintain these routes as needed to ensure safe and efficient vehicle and pedestrian movement during emergency conditions.						
Existing	All	1,2,4,9	City	Medium	General Fund, STIP, Grants	Short Term
Initiative # DUN 4 —Encourage, support, and maintain ongoing coordination with the California Department of Transportation, highway contractor, emergency response agencies, and public whenever construction will occur on Interstate 5 that has the potential to significantly delay emergency response efforts and/or impact evacuation.						
Existing	All	1,2,4,5,7,8,9	City	Low	General Fund	Ongoing
Initiative # DUN 5 —Ensure that the city’s audible emergency warning system is audible throughout the community and that the system is capable of remaining operational during extended power outages.						
Existing	All	1,2,4,9	City	Medium	General Fund, Grants	Short Term
Initiative # DUN 6 —Reduce fuel loads in highest fire severity zones within and adjacent to the city through pursuit of grant funding, interagency coordination, and collaboration with property owners, volunteer groups and non-profit organizations (e.g., fire safe councils and resource conservation districts).						
Both	Wildfire	1,2,4,8,9	City, Fire Safe Council, RCD	Low	City, Grants	Short Term

**TABLE 3.5-7.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost ^a	Sources of Funding	Timeline
Initiative # DUN 7 —Increase reliability, capacity, and fire safety through the addition of a new 0.9 MG water storage tank in the Downtown Pressure Zone, strengthening of the main distribution system, and replacement of pipelines that are at or beyond their serviceable life.						
Both	Wildfire, Drought	1,2,4	City	High	City, Grants	Short Term
Initiative # DUN 8 —Facilitate and support communitywide fuel reduction efforts through enforcement of hazardous vegetation ordinance, free green waste drop-off days, and other programs.						
Both	Wildfire	1,2,4,5,7,8	City, Fire Safe Council	Low	City, Grants	Short Term
Initiative # DUN 9 —Develop a post-disaster action plan that includes grant funding and debris removal components. The grant funding component should include a list of private, nonprofit, and government funding sources as well as the funding requirements for same.						
N/A	All	1,2,4	City	Medium	City, Grants	Short Term
Initiative # DUN 10 —Continue to improve upon the city’s assessment of its hazard vulnerabilities, including through detailed assessments of risks to critical structures and infrastructure, to better inform and prioritize actions needed to safeguard the community.						
Both	All	1,2,3,4,7	City	Medium	City, Grants	Short Term
Initiative # DUN 11 —Pursue structural and non-structural retrofitting and relocation of existing facilities, as needed, to mitigate identified hazards.						
Existing	All	1,2,4,6	City	High	City, Grants	Long Term
Initiative # DUN 12 —Relocate city-owned critical facilities out of identified high hazard risk zones to lessen or eliminate identified risk(s).						
Both	All	1,2,4,6	City	High	City, Grants	Long Term
Initiative # DUN 13 —Encourage and support the undergrounding of existing utilities and require that new utility infrastructure be located underground where feasible and appropriate.						
Both	Wildfire, dam failure, severe weather, flood, volcanic	1,2,3,4,6	City	Medium	City, Grants	Short Term
Initiative # DUN 14 —Stockpile crucial supplies and replacement parts that may be difficult to obtain during emergency conditions, such as sewer and water line, snowmelt, sandbags, face masks, batteries, fuel filters, air filters, sand, etc.						
Existing	All	1,2,4,9	City	Low	City	Short Term

**TABLE 3.5-7.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost ^a	Sources of Funding	Timeline
Initiative # DUN 15 —Provide for redundancy in all communication systems and critical infrastructure, including through the provision emergency back-up power.						
Existing	All	1,2,4,6,9	City	Medium	City, Grants	Long Term
Initiative # DUN 16 —Establish a dam failure early warning alert for the city’s audible emergency warning system, along with signs alerting the public to the hazard and directing them to higher ground when and where appropriate.						
Both	Dam Failure	1,2,4,5,7,9	City	Low	City	Short Term
Initiative # DUN 17 —Continue to maintain compliance and good standing in the National Flood Insurance Program (NFIP).						
Both	Flood	1,2,3,4,5,6	City	Low	City	Short Term
Initiative # DUN 18 —Consider participation in the Community Rating System (CRS) program.						
Both	Flood	1,2,3,4,5,6	City	Low	City	Short Term
Initiative # DUN 19 — Support County-wide initiatives identified in Volume 1 of this Plan.						
Both	All	1,2,3,4,5,6,7,8,9	City	Low	City	Short Term
Initiative # DUN 20 —Continue to support the implementation, monitoring, maintenance and updating of this Plan as identified in Volume 1.						
Both	All	1,2,3,4,5,6,7,8,9	City	Low	City, Grants	Short Term
a. Cost estimates are preliminary and need to be refined at the time of project development.						

**TABLE 3.5-8.
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
DUN 1	4	High	Low	Yes	Yes	No	High
DUN 2	6	High	Low	Yes	Yes	No	High
DUN 3	4	High	Med	Yes	Yes	No	High
DUN 4	7	High	Low	Yes	No	Yes	High
DUN 5	4	High	Med	Yes	Yes	No	High
DUN 6	5	High	Med	Yes	Yes	No	High
DUN 7	3	High	High	Yes	No	No	Med

**TABLE 3.5-8.
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
DUN 8	6	High	Low	Yes	Yes	Yes	High
DUN 9	3	Med	Low	Yes	Yes	No	Med
DUN 10	5	Med	Med	Yes	Yes	No	High
DUN 11	4	Med	High	Yes	Yes	No	Low
DUN 12	4	Med	High	Yes	Yes	No	Low
DUN 13	5	Med	High	Yes	Yes	No	Low
DUN 14	4	High	Low	Yes	No	Yes	High
DUN 15	5	High	High	Yes	Yes	No	Med
DUN 16	6	High	Low	Yes	Yes	No	Med
DUN 17	6	Low	Low	Yes	No	Yes	High
DUN 18	6	Med	Low	Yes	No	Yes	Med
DUN 19	9	Med	Low	Yes	No	Yes	High
DUN 20	9	Med	Low	Yes	Yes	Yes	High

a. See Section 20.3 for definitions of high, medium and low priorities.

**TABLE 3.5-9.
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	2,10,19,20	2,12,13	1,2,4,5,9,10,16,19,20		1,2,3,4,5,9,10,14,15	11
Drought	10,19,20	2	1,2,4,5,9,10,19,20		1,2,3,4,5,9,10,14,15	7
Earthquake	10	2,12,13	1,2,4,5,9,10		1,2,3,4,5,9,10,14,15	11
Flood	10,13,17,19,20	2,12,13,17	1,2,4,5,9,10,17	17	1,2,3,4,5,9,10,14,15,17	11,17
Landslide	10,13	2,12,13	1,2,4,5,9,10,19,20		1,2,3,4,5,9,10,14,15	11
Severe Weather	10,13,19,20	2,12,13	1,2,4,5,9,10,19,20		1,2,3,4,5,9,10,14,15	11
Volcano	10,13,19,20	2,12,13	1,2,4,5,9,10,19,20		1,2,3,4,5,9,10,14,15	11
Wildfire	8,10,13,19,20	2,12,13	1,2,4,5,6,8,9,10,19,20	6,8	1,2,3,4,5,6,8,9,10,14,15	7,11

a. See page C.1-10 for description of mitigation types

TABLE 3.5-10. COMMUNITY OUTREACH
WILL BE PERFORMING THESE OUTREACH EVENTS AND WILL INCLUDE MITIGATION EDUCATION TO THE PUBLIC.
Outreach
Community Meetings Go Bag Planning Schools
Fire Safe Council Meetings
PSA about Emergency Notification System and Testing
Use of Facebook and Twitter