Plumas County

Local Hazard Mitigation Planning Project

HMPC Meeting #2 – Risk Assessment

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Four Phases of Emergency Management

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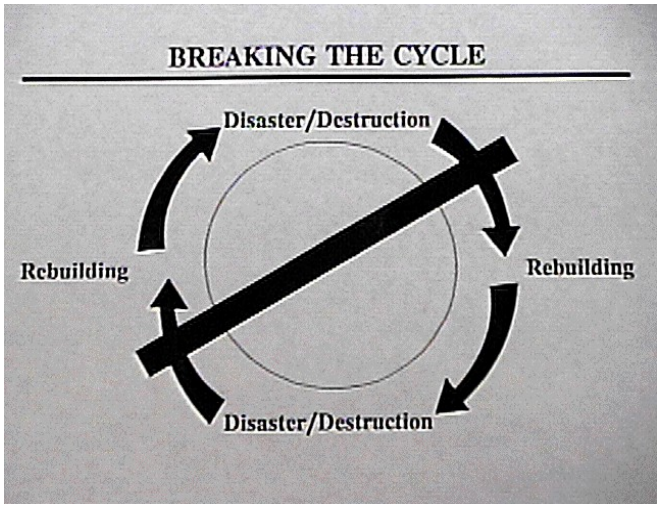
Hazard Mitigation

Mitigation Defined: ***Any SUSTAINED action taken to reduce or eliminate long-term risk to human life, property and the environment from hazards***



Effective mitigation efforts can break the cycle of disaster damage, reconstruction, and repeated damage

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Benefits of Hazard Mitigation Planning

- Eligibility for FEMA pre- and post-disaster funding
- Opportunity for interagency collaboration – building mitigation partners
- Integration and linking of hazard mitigation principals and policies
- Engagement and education of public and private stakeholders
- Identifying, evaluating, and prioritizing potential risk reduction measures
- Reduce damages, minimize post-disaster disruptions.
- Speed recovery when disasters occur
- Promote long-term resilience!

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FEMA's 4-Phase-10 Step DMA/CRS Planning Process

Phase I: Organize Resources

1) Get organized

2) Plan for public involvement

3) Coordinate with other departments and agencies

Phase II: Risk Assessment

4) Identify the hazard(s)

5) Assess the risks

Capability Assessment

Phase III: Mitigation Strategy

6) Set planning goals

7) Review mitigation alternatives

8) Draft and action plan

Phase IV: Adoption and Implementation

9) Adopt the plan

10) Implement the plan, evaluate its worth, and revise as needed

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2026 Plumas County Multi-Jurisdictional Local Hazard Mitigation Plan

Participating Jurisdictions*

Plumas County
City of Portola
Chester PUD
Feather River RCD
Gold Mountain CSD
Grizzly Lake CSD
Indian Valley PUD
Plumas Eureka CSD
Plumas Corp/ Fire Safe Council
South Feather Water and Power

*Plumas County and City of Portola were the only two participating jurisdictions to the 2020 and 2019 LHMPs.

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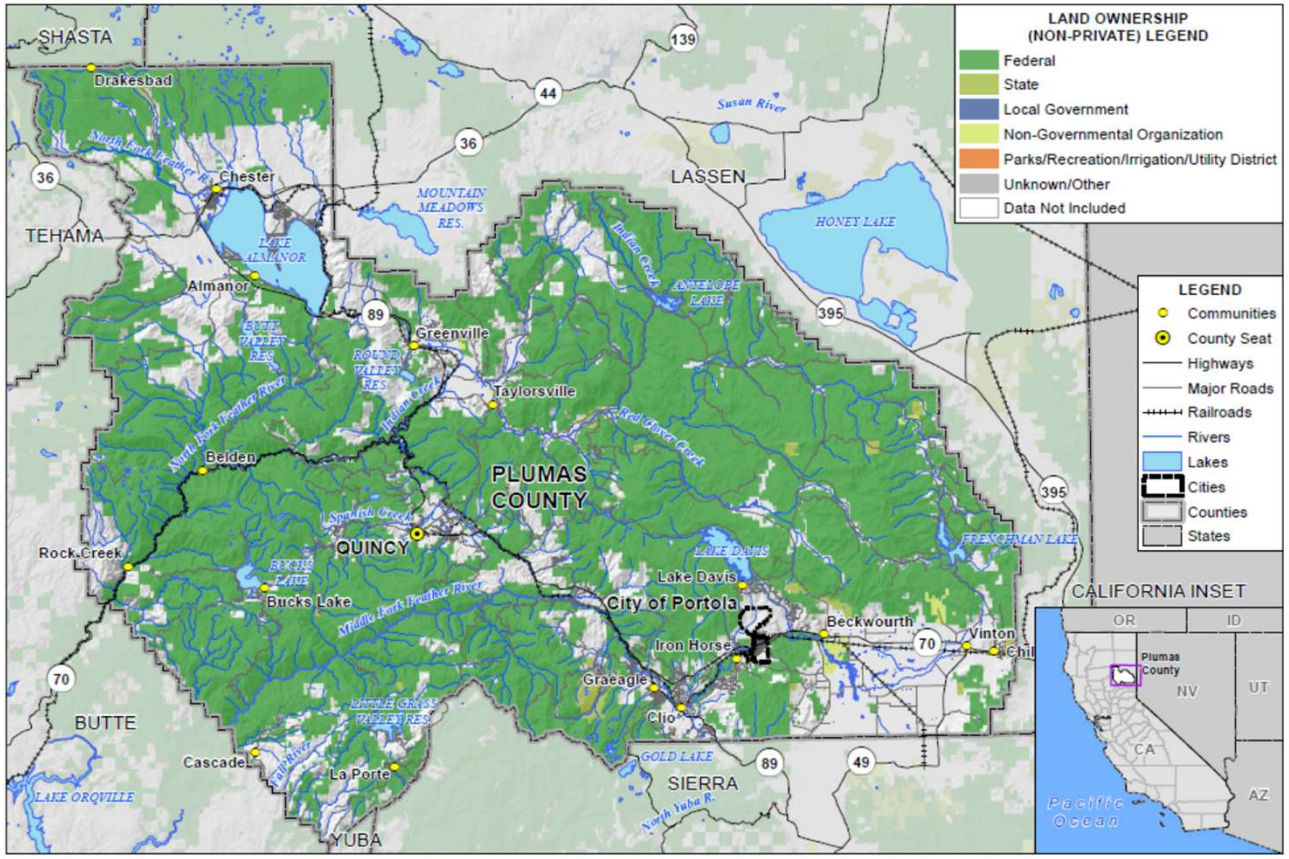
Plumas County: Land Ownership Table



Land Ownership	Total Acres	% of Total Acres
Federal	1,336,447	73.71%
State	11,965	0.66%
Local Government	75	0.00%
Non-Governmental Organization	6,811	0.38%
Parks/Recreation/Irrigation/Utility District	6	0.00%
Unknown/Other	70	0.00%
Data Not Included*	457,705	25.24%
Grand Total	1,813,080	100.00%

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Planning Area Inventories: Assets at Risk

- Structures (Parcel/Structure Analysis and Owned Assets)
- People and Population (Includes Underserved/Vulnerable Populations/AFN)
- Critical Facilities and Community Lifelines
- Natural, Historical and Cultural Resources
- Economic Assets and Community Activities of Value

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Planning Area Inventories: Total Values (Parcels & Structures)

Plumas County Planning Area

Total Parcel and Structure Assets by Jurisdiction

Jurisdiction	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686
Unincorporated Plumas County	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191
Grand Total	25,877	14,448	$1,702,945,099	$3,354,196,312	$143,442,635	$1,828,800,830	$7,029,384,876

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Planning Area Inventories: Total Values (Parcels & Structures)

Unincorporated Plumas County: Total Parcel and Structure Assets by Property Use

Jurisdiction / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
Agricultural	1,310	118	$70,282,817	$24,979,645	$2,766,527	$24,979,645	$123,008,634
Commercial	853	556	$78,599,880	$164,344,412	$32,275,885	$164,344,412	$439,564,589
Federal Lands	217	0	$0	$0	$0	$0	$0
Government	599	0	$124,956	$0	$0	$0	$124,956
Industrial	140	85	$10,733,621	$18,449,533	$33,550,208	$27,674,300	$90,407,662
Institutional	80	39	$2,145,116	$13,936,169	$196,380	$13,936,169	$30,213,834
Miscellaneous	26	0	$9,591	$0	$0	$0	$9,591
Recreational	519	91	$18,190,148	$25,212,673	$1,814,124	$25,212,673	$70,429,618
Residential	19,424	12,538	$1,484,908,599	$2,956,022,846	$70,924,439	$1,478,011,423	$5,989,867,307
ROW/Utilities	1,066	0	$0	$0	$0	$0	$0
Unincorporated Plumas County Total	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191

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Planning Area Inventories: Total Values (Parcels & Structures)

City of Portola: Total Parcel and Structure Assets by Property Use

Jurisdiction / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola							
Agricultural	2	1	$536,231	$1,400,712	$0	$1,400,712	$3,337,655
Commercial	146	103	$7,583,297	$30,701,619	$1,484,240	$30,701,619	$70,470,775
Federal Lands	0	0	$0	$0	$0	$0	$0
Government	34	0	$0	$0	$0	$0	$0
Industrial	10	3	$325,236	$230,745	$0	$346,118	$902,099
Institutional	10	8	$224,898	$5,469,562	$147,200	$5,469,562	$11,311,222
Miscellaneous	2	0	$19	$0	$0	$0	$19
Recreational	1	0	$0	$0	$0	$0	$0
Residential	1,389	906	$29,280,690	$113,448,396	$283,632	$56,724,198	$199,736,916
ROW/Utilities	49	0	$0	$0	$0	$0	$0
City of Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686

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Planning Area Inventories: People and Populations

Plumas County Planning Area
General Populations by Jurisdictions

Jurisdiction	Population
City of Portola	2,075
Unincorporated Plumas County	16,766
Total	18,841

Source: California Department of Finance, E-1 Report, 2024

Plumas County Planning Area – Population Growth 1940-2024

Year	Population	Percent Increase
1940	11,548	–
1950	13,519	17.1%
1960	11,620	-14.0%
1970	11,707	0.7%
1980	17,340	48.1%
1990	19,739	13.8%
2000	20,824	5.5%
2010	20,007	-3.9%
2020	19,790	-1.1%
2024	18,841	-0.5%

Sources: 2019-2024 Plumas County Housing Element Background Report, California Department of Finance, US Census Bureau

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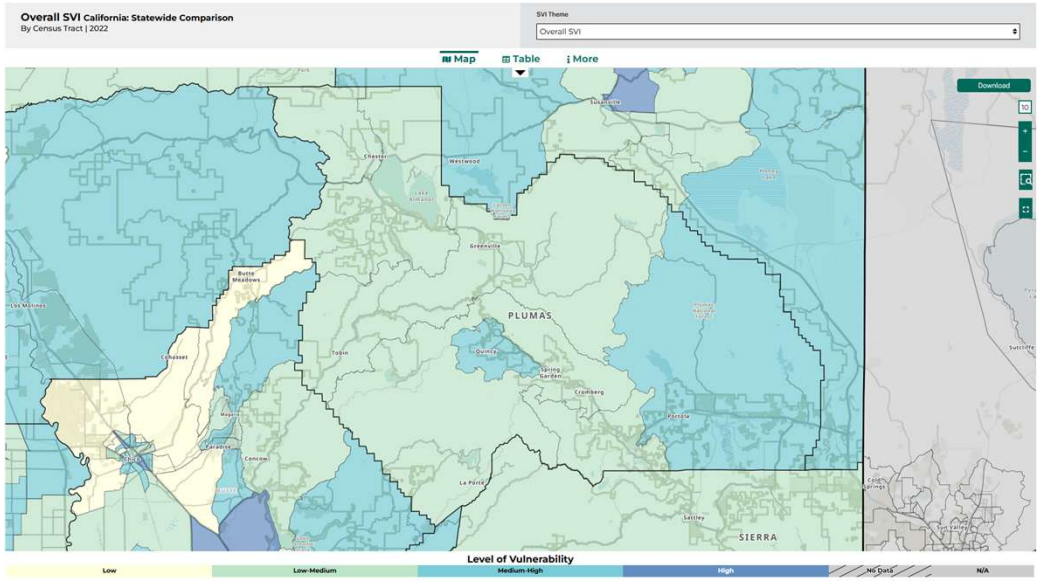
Planning Area Inventories: People and Populations

Vulnerable and Underserved Populations

Plumas County Planning Area – Overall Social Vulnerability



Center for Disease Control Social Vulnerability Index

- *Socioeconomic Status Vulnerability*
- *Household Composition and Disabilities Social Vulnerability*
- *Minority/Language Social Vulnerability*
- *Housing/Transportation Social Vulnerability*

Source: CDC Social Vulnerability Index – map retrieved 2/14/2023
Level of Vulnerability Rating: **Yellow** – Low; **Green** – Low/Medium; **Aqua** – Medium/High; **Blue** – High; **Grey Hatched** – No Data; **Grey** – Not Available

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Planning Area Inventories: Critical Facilities (Definition)

For purposes of this plan, a critical facility is defined as:

Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.

A critical facility is classified by the following categories: **(1) Essential Services Facilities, (2) At-Risk Populations Facilities, 3) Hazardous Materials Facilities**

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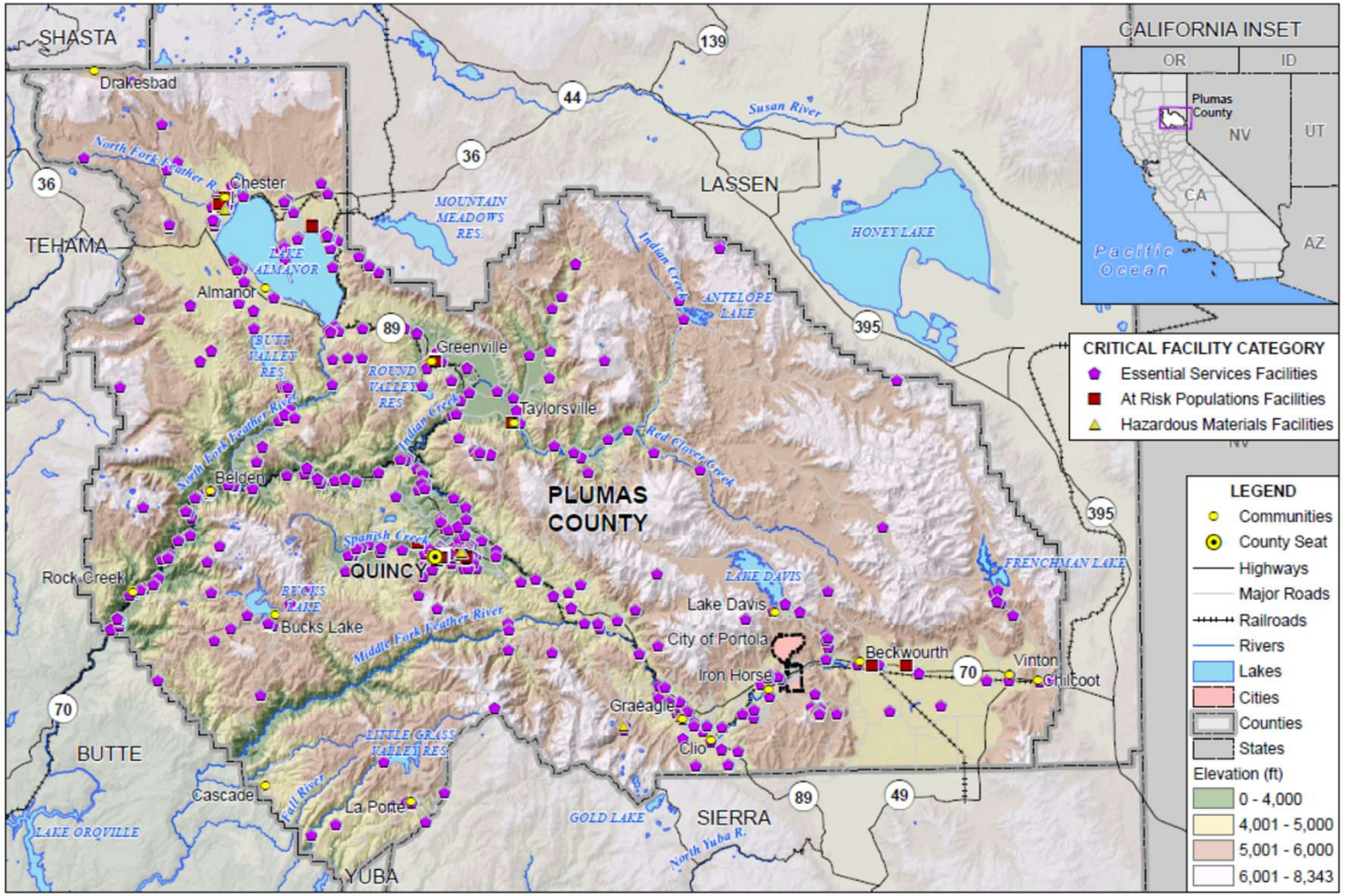
Critical Facilities

2020

Plumas County Planning Area

Critical Facilities Inventory



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Planning Area Inventories: Community Lifelines

Community Lifelines includes the following (as defined by FEMA):

- Safety and Security – Law Enforcement/Security, Fire Service, Search and Rescue, Government Service, Community Safety
- Food, Hydration, Shelter – Food, Water, Shelter, Agriculture
- Health and Medical – Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management
- Energy – Power Grid, Fuel
- Communications – Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch
- Transportation – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime
- Hazardous Material – Facilities, HAZMAT, Pollutants, Contaminants
- Water Systems – Potable Water Infrastructure, Wastewater Management

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Planning Area Inventories: Natural Resources

Plumas County Planning Area – Summary of Special Status Species

Type	Number
Animals - Amphibians	2
Animals - Birds	47
Animals - Fish	7
Animals - Insects	6
Animals - Mammals	26
Animals – Mollusks	11
Animals – Reptiles	2
Community – Aquatic	3
Community – Terrestrial	1
Plant – Bryophytes	2
Plants – Vascular	171

Source: California Natural Diversity Data 1/2025

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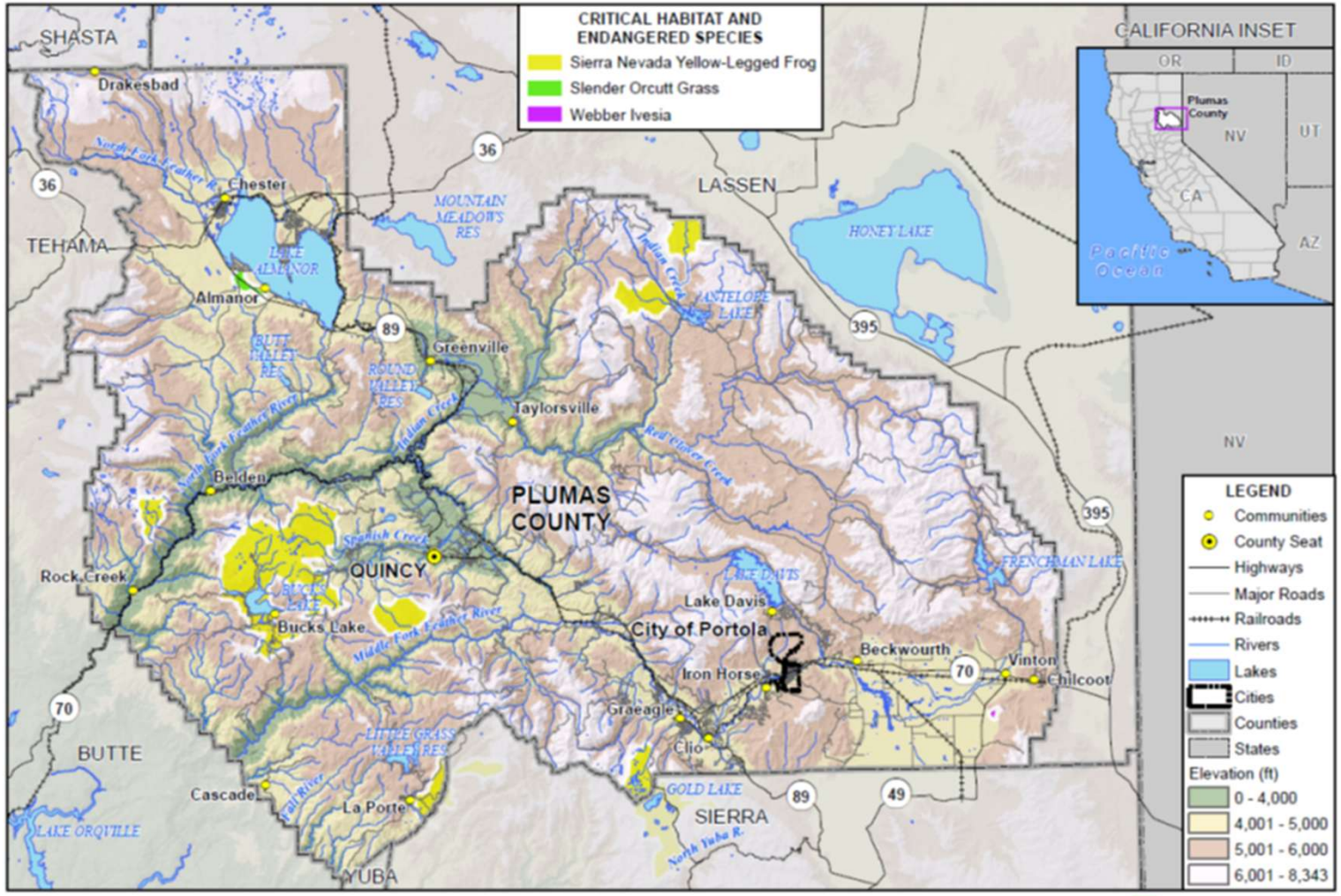
Planning Area Inventories: Natural Resources

Critical Habitat and Endangered Species



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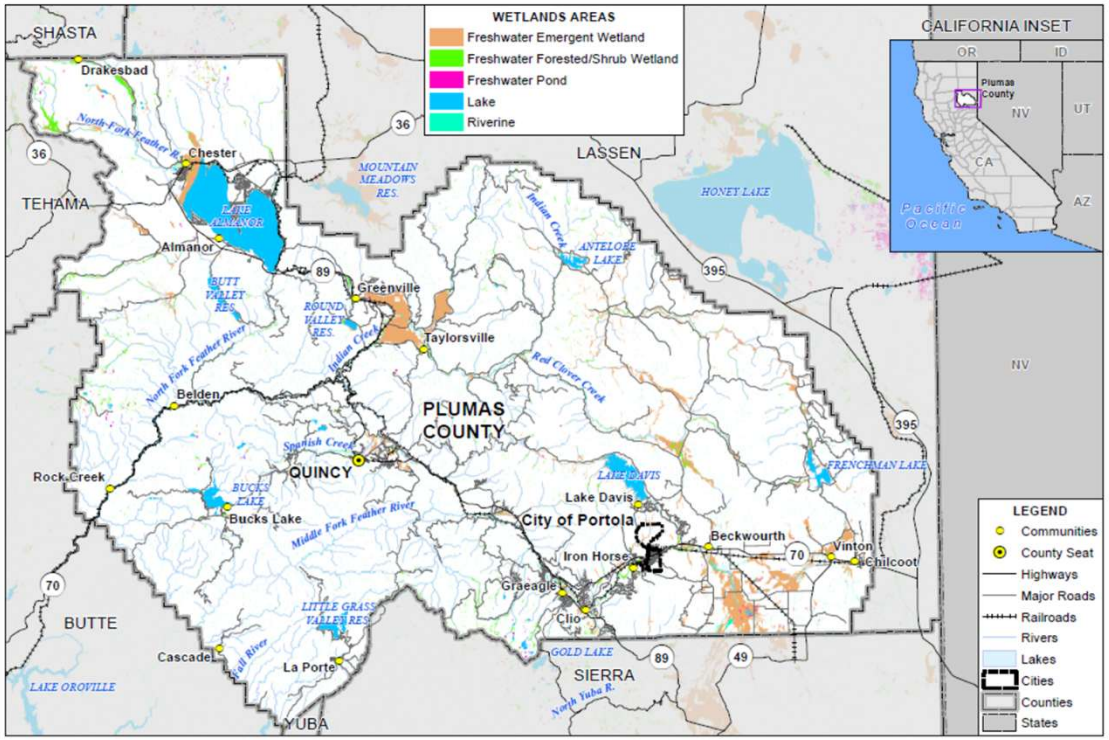
Planning Area Inventories: Wetlands

Plumas County Planning Area – Wetlands Inventory



Wetlands Area Type	Wetlands Count	Wetlands Area (in Acres)
City of Portola		
Freshwater Emergent Wetland	54	126.35
Freshwater Forested/Shrub Wetland	9	9.67
Freshwater Pond	1	0.18
Lake	0	0.0
Riverine	56	30.91
Non-Wetland*	1,643	3,324.21
City of Portola Total	1,763	3,491.32
Unincorporated Plumas County		
Freshwater Emergent Wetland	7,077	43,290.38
Freshwater Forested/Shrub Wetland	7,571	11,795.93
Freshwater Pond	769	874.03
Lake	373	36,595.95
Riverine	18,236	14,995.44
Non-Wetland*	24,195	1,561,082.10
Unincorporated Plumas County Total	58,221	1,668,633.84

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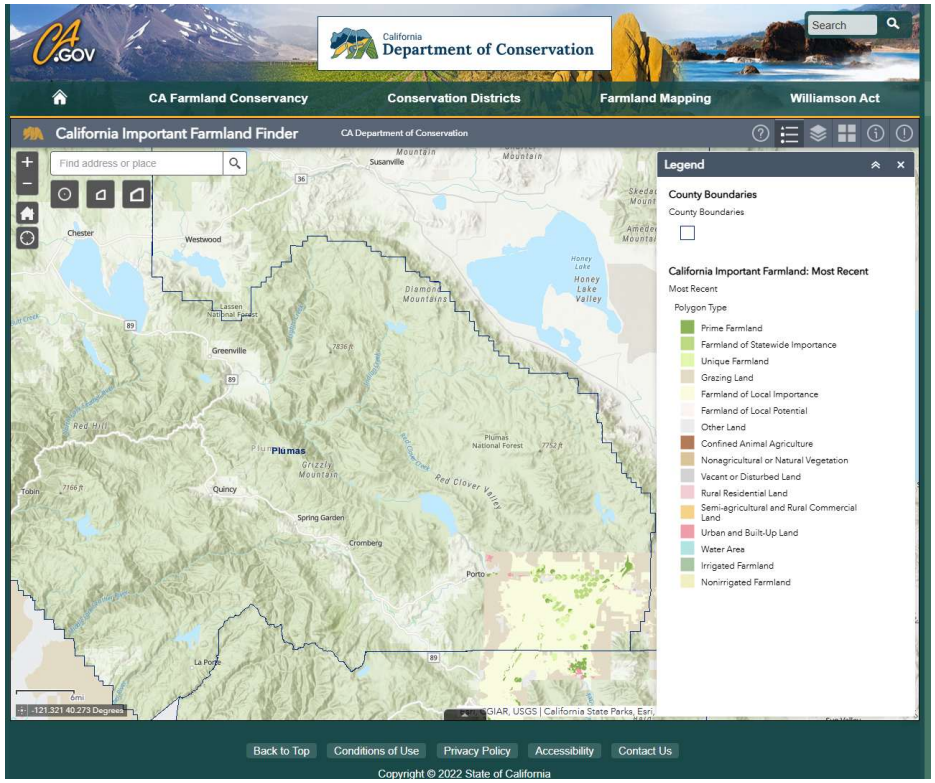
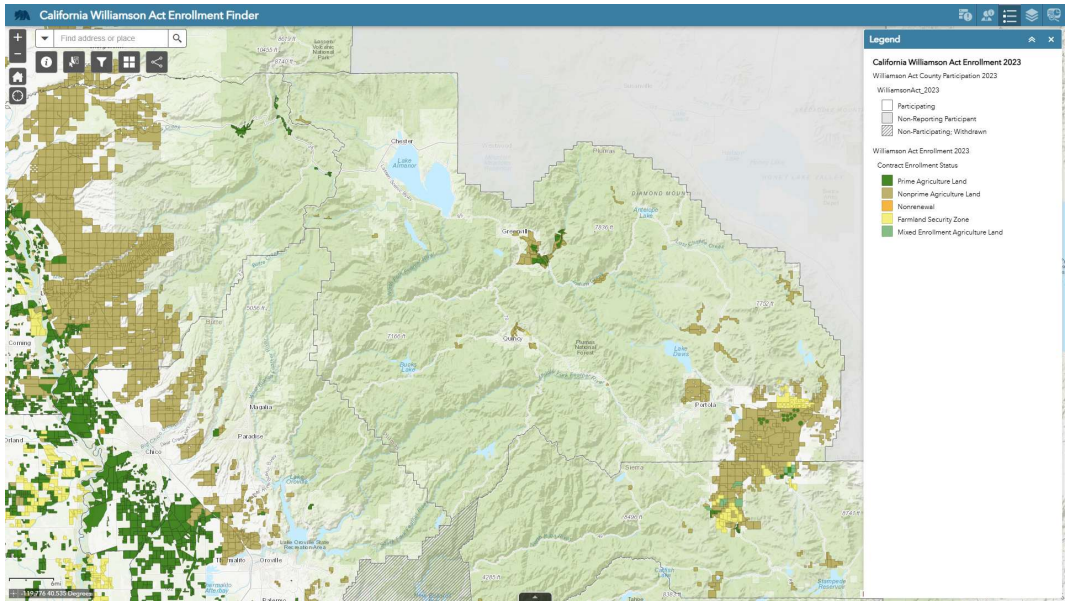
Planning Area Inventories: Natural Resources

Important Farmlands



Williamson Act Lands



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Planning Area Inventories: Historic & Cultural Resources

Historical Resources

Resource Name (Plaque Number)	National Register	State Landmark	California Register	Point of Interest	Date Listed	City/ Community
Beckwourth Pass (336)		X			8/8/1939	Chilcoot
Buck's Lake (197)		X			6/20/1935	Quincy
Ch'ichu'yam-Bam (N2213)	X				9/25/2003	Crescent Mills
Chinese American Cemetery, Plumas County Memorial Park (P770)				X	5/11/1992	Quincy
Drakesbad Guest Ranch (N2216)	X				10/22/2003	Chester
Elizabethtown (231)		X			6/20/1935	Quincy
James P. Beckwourth Ranch & Trading Post (P183)				X	9/24/1970	Beckwourth
Jamison City, Eureka Mills, Johnstown, and The Famous Eureka Mine (196)		X			6/20/1935	Blairsden
Lakes Basin Petroglyphs (N85)	X				5/6/1971	Gold Lake
Marysville-Carson City Trail (P620)				X	8/16/1983	Plumas National Forest
Peter Lassen Marker (Site Of Lassen Trading Post) (184)		X			6/20/1935	Greenville
Pioneer Grave (Grizzly Creek) (212)		X			6/20/1935	Quincy
Pioneer Schoolhouse (625)		X			1/13/1958	Quincy
Pioneer Ski Area of America, Johnsville (723)		X			1/18/1960	Blairsden
Plumas-Eureka Mill, Jamison Mines District (N249)	X				7/16/1973	Blairsden
Rabbit Creek Hotel Monument (213)		X			6/20/1935	La Porte
Rich Bar (337)		X			8/8/1939	Quincy
Site of American Ranch And Hotel (479)		X			11/9/1950	Quincy
Site Of Plumas House (480)		X			11/9/1950	Quincy
Spanish Ranch and Meadow Valley (481)		X			11/9/1950	Quincy
Taylorsville Schoolhouse (P742)				X	5/8/1991	Taylorsville
Town Of Taylorsville (P318)				X	9/12/1973	Taylorsville
Warner Valley Ranger Station (N579)	X				4/3/1978	Chester

Sources: National Register, California Landmark, California Register, Point of Interest

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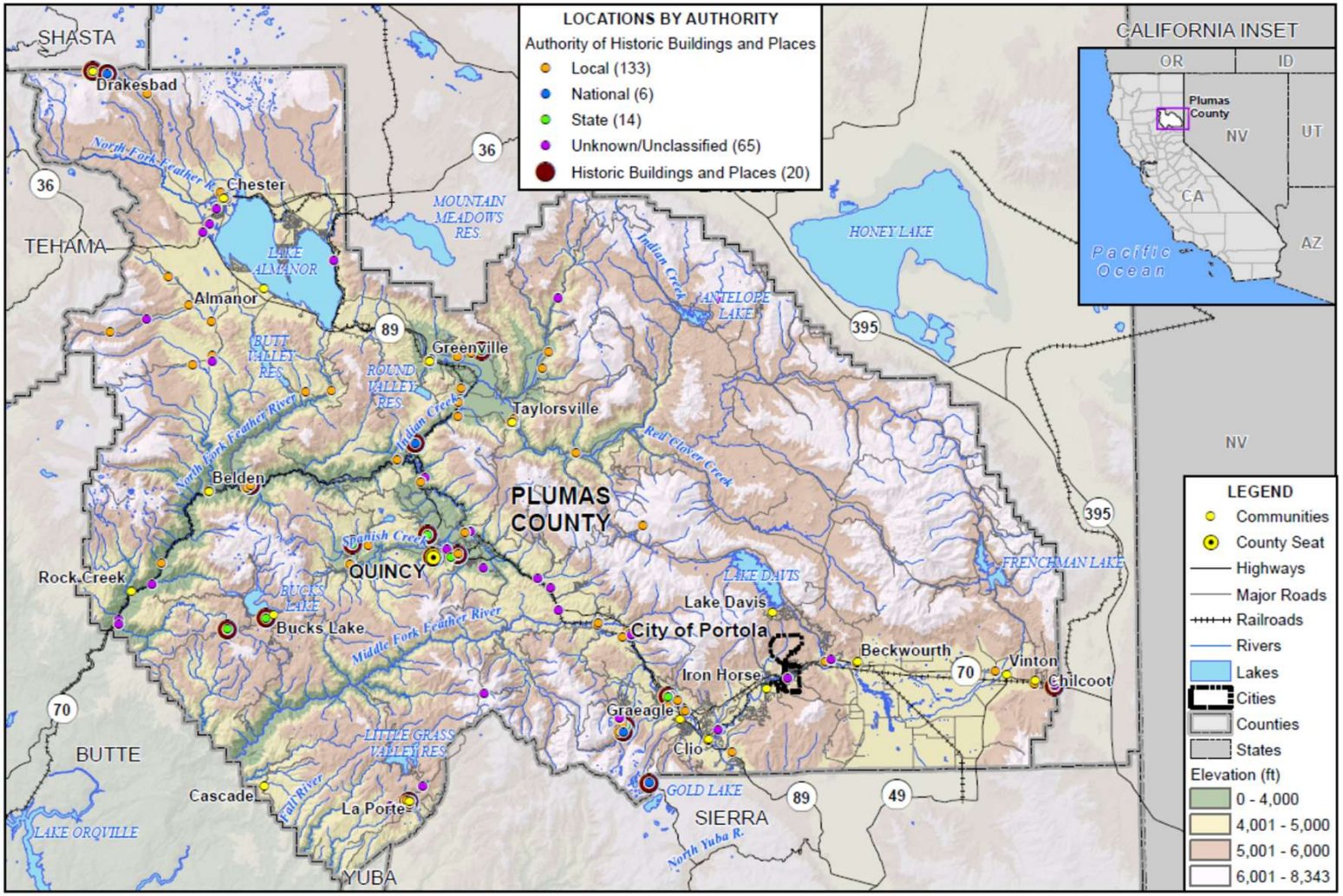
Planning Area Inventories: Historic & Cultural Resources

Historical Buildings and Places



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Planning Area Inventories: Economic Assets & Community Activities of Value

The County noted that Key Economic Drivers include the Agricultural Industry, Government, Tourism.

Inventorying economic assets in the Plumas County Planning Area and their vulnerability to natural hazards and disasters also involves inventorying activities that have value to the community:

Pacific Crest Trail; Plumas Corporation; Sierra Pacific Industries; Collins Pines; Plumas County; City of Portola; High Sierra Music Festival; 4th of July activities throughout Plumas County; Fair; Mountain Biking events; Christmas activities; Land Trust; Recreation; Plumas National Forest; Plumas Unified School District; Hospitals; Central Plumas Recreation District; Almanor Recreation District; Tourism; Feather River College; PG&E

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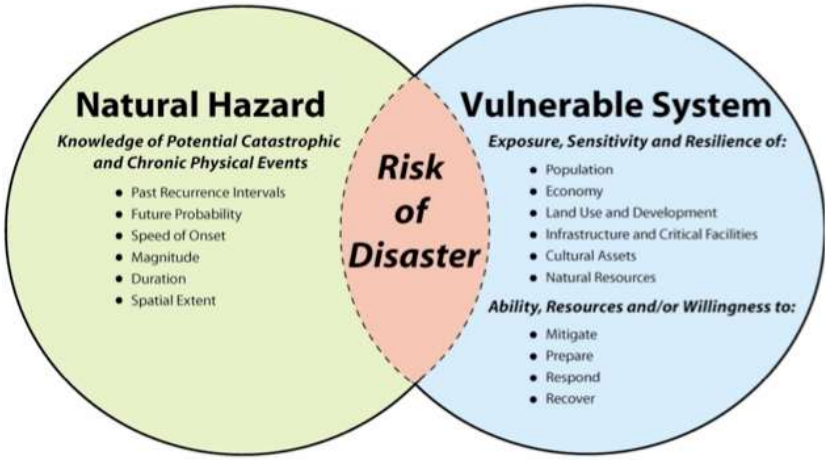
Phase II: Risk Assessment

Three Components

4) Hazard Identification (what can happen here?)

5) Vulnerability Assessment (what will be affected?)

Capability Assessment (how prepared are we?)



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Hazard Identification

- Agricultural Hazards: Severe Weather/Insects/Pests
- Climate Change
- Dam Failure
- Drought and Water Shortage (w/tree mortality)
- Earthquake
- Flood: 1%/0.2% annual chance (w/levee Failure)
- Flood: Localized/Stormwater
- Hazardous Materials Transportation
- Landslide, Mudslide, and Debris Flows
- Severe Weather: Extreme Cold, Freeze, and Snow (w/avalanche)
- Severe Weather: Extreme Heat
- Severe Weather: Heavy Rains and Storms (hail, lightning, wind)
- Severe Weather: High Winds and Tornadoes
- Volcano
- Wildfire (w/smoke and air quality)

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FEMA/Cal OES Disaster Declaration History

Plumas County Disaster Declarations 1950-2025 Summarized by Disaster Type

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Drought	1	2014	1	1997
Economic	1	2001	0	–
Fire	7	1960, 1987, 1999, 2020, 2021 (three)	6	1999, 2008, 2020 (twice), 2021 (twice)
Flood	22	1950, 1955, 1958 (twice), 1964, 1963, 1964, 1969, 1970 1980, 1986, 1993, 1992*, 1995 (twice*), 1996, 1997, 2006, 2017 (twice*), 2023 (twice*)	19	1950, 1955, 1958 (twice), 1963, 1964, 1969, 1970, 1986, 1992 (twice), 1995 (twice), 1997, 2006*, 2017 (twice*), 2023 (twice*)
Freeze	1	2007	0	–
Hurricane	0	–	1	2005
Pandemic	2	2020 (twice)	2	2020 (twice)
Seismic Sea Wave (Tsunami)	0	–	1	1964
Totals	34		30	

Plumas County Disasters since 2019 :

- **2020 California Covid-19 Pandemic (2 state and 2 federal declarations)**
- **2020 California Wildfires (federal declaration)**
- **2020 Bear Fire (state and federal declaration)**
- **2021 Northeast Wildfires (state declaration)**
- **2021 Dixie Fire (state and federal declaration)**
- **2021 California Wildfires (state and federal declaration)**
- **2023 California Severe Winter Storms, Flooding, Landslides, and Mudslides (2 federal and 2 state declarations)**

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US Department of Agricultural (USDA) Disaster Declaration History

Plumas County USDA Disaster Declarations 2012 - 2024

- 13 Drought
- 3 Freeze
- 1 Excessive rain / high winds / cold temperatures/ hail

Plumas County USDA Disasters since 2019/2020 LHMPs

- 6 Drought
- 3 Freeze

Year Declared/Disaster Type	Designation Number	Primary or Contiguous	Begin Date
2012			
Drought-FAST TRACK	S3248	Contiguous	5/31/2012
Drought-FAST TRACK	S3268	Primary	7/12/2012
2013			
Drought – FAST TRACK	S3491	Contiguous	1/1/2013
2014			
Drought – FAST TRACK	S3637	Primary	1/14/2014
2015			
Drought – FAST TRACK	S3784	Primary	1/1/2015
2016			
Drought – FAST TRACK	S3952	Primary	1/1/2016
Excessive rain, high winds, cold temperatures, and hail	S4170	Contiguous	3/1/2016
2017			
–	–	–	–
2018			
Drought – FAST TRACK	S4349	Contiguous	2/28/2018
2019			
–	–	–	–
2020			
Drought – FAST TRACK	S4675	Primary	4/14/2020
Drought – FAST TRACK	S4691	Primary	4/21/2020
Drought – FAST TRACK	S4697	Contiguous	4/21/2020
2021			
Drought – FAST TRACK	S4916	Primary	10/1/2020
2022			
Drought – FAST TRACK	S5146	Primary	4/8/2022
Freeze	S5229	Contiguous	7/1/2022
Freeze	S5332	Contiguous	4/12/2022
2023			
Drought – FAST TRACK	S5371	Primary	10/1/2022
Freeze	S5556	Contiguous	2/16/2023
2024			
–	–	–	–

Severe Weather: Extreme Cold, Freeze, and Snow

Quincy Weather Station

Plumas County (WRCC) Record Lows 1895 to 2008

Month	Record Low	Date	Month	Record Low	Date
January	-28°	1/8/1937	July	23°	7/1/1912
February	-19°	2/13/1949	August	20°	8/31/1910
March	0°	3/20/1952	September	15°	9/28/1972
April	12°	4/6/1982	October	6°	10/27/1917
May	20°	5/7/1984	November	-3°	11/12/1985
June	25°	6/4/1950	December	-24°	12/12/1972

Plumas County (NWS) Record Lows 1885 to 2025

Temperature	Date
-24.0°	12/12/1972
-24.0°	1/20/1937
-22.0°	12/9/1972
-22.0°	1/7/1937
-20.0°	1/21/1937
-20.0°	1/9/1937
-19.0°	1/3/1950
-19.0°	1/25/1949
-18.0°	1/24/1949
-16.0°	2/5/1989

Plumas County – (NWS) Highest Daily Snowfall 1885 to 2025

Snowfall in Inches	Date
36.0	3/23/1907
34.0	1/30/1968
30.0	10/30/1909
30.0	12/22/1908
26.0	2/27/1955
24.0	1/18/1955
24.0	1/12/1952
24.0	1/13/1911
24.0	1/11/1911
24.0	1/14/1910

Snow Depth in Inches	Date
58.0	1/29/1916
54.0	1/30/1916
53.0	1/15/1952
52.0	1/14/1952
52.0	1/31/1916
51.0	1/16/1952
50.0	1/17/1952
49.0	2/3/1937
48.0	1/18/1916

Plumas County – (NWS) Highest Maximum Snow Depth 1885 to 2025

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Severe Weather: Extreme Cold, Freeze and Snow

Past Occurrences

Plumas County NCDC Cold/Freeze Events 1/1/1950-7/31/2024

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
Blizzard	3	0	0	0	0	$0	$0
Cold/Wind Chill	3	0	0	0	0	$0	$0
Freezing Fog	1	0	0	0	0	$0	$0
Heavy Snow	330	1	0	0	0	$220,000	$0
Ice Storm	1	0	0	0	0	$0	$0
Winter Storm	150	0	0	0	0	$150,000	$0
Winter Weather	61	0	0	0	0	$0	$0
Total	549	1	0	0	0	$370,000	$ 0

USDA Disaster Declarations 2012 - 2024

- 3 Freeze
- 1 Excessive rain / high winds / cold temperatures/ hail

FEMA Disaster Declarations for Freeze:

- 1 State - 2007

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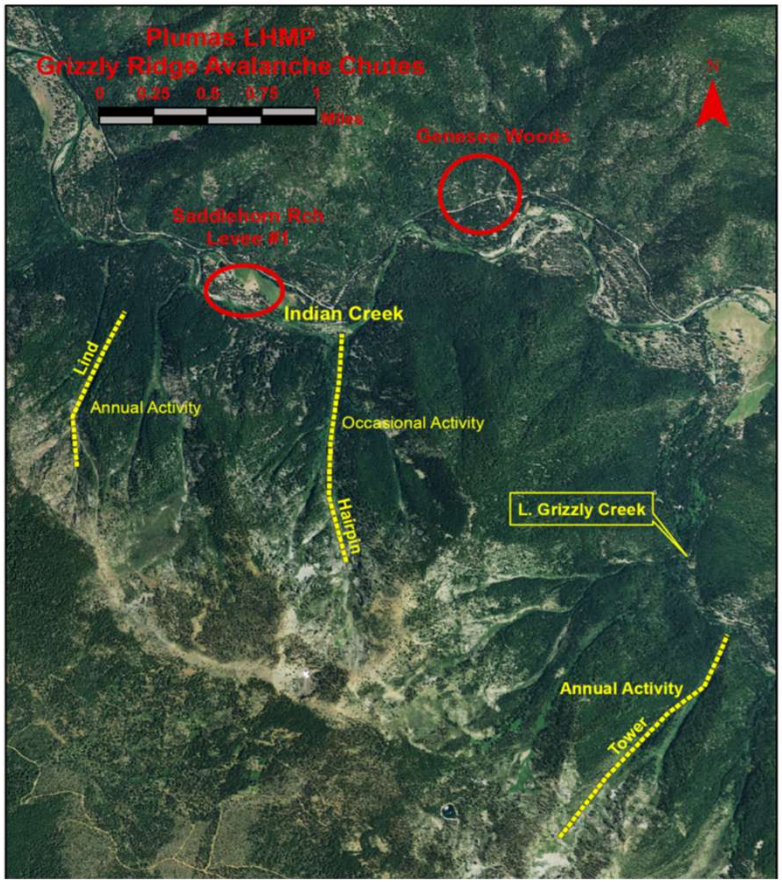
Avalanche

Grizzly Ridge Avalanche Areas



No FEMA State or Federal Disaster Declarations for Avalanche in Plumas County

No NCDC Avalanche Events in Plumas County

Avalanche Prone Areas:

Grizzly Ridge in Gennesee – Avalanches occur with regularity. These have blocked Indian Creek and Little Grizzly Creek and/or Grizzly Creek. There are 4 homes in the area that have their ingress and egress routes blocked. There are numerous avalanche chutes on the northeast and north faces of Grizzly Ridge in the Genesee Valley area.

Others?

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Severe Weather: Extreme Heat

Quincy Weather Station

Plumas County (WRCC) Record Highs 1943 to 2016

Month	Record High	Date	Month	Record High	Date
January	74°	1/23/1918	July	109°	7/21/1994
February	80°	2/17/1920	August	110°	8/09/1981
March	85°	3/13/1910	September	110°	9/05/1988
April	89°	4/21/2006	October	98°	10/22/1988
May	100°	5/24/1992	November	86°	11/09/1990
June	105°	6/17/1895	December	76°	12/14/1921

Plumas County (NWS) Record Highs 1885 to 2025

Temperature	Date
111.0°	8/6/1994
111.0°	7/31/1994
110.0°	8/7/1990
110.0°	9/5/1988
109.0°	8/9/1981
109.0°	7/11/2002
109.0°	7/21/1994
109.0°	8/8/1981
108.0°	8/3/1993
108.0°	8/12/1992

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Severe Weather: Extreme Heat

Past Occurrences

Plumas County NCDC Extreme Heat Events 1/1/1950-7/31/2024

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
Excessive Heat	5	0	0	0	0	$0	$0
Heat	2	0	0	0	0	$0	$0
Total	7	0	0	0	0	$ 0	$ 0

No (FEMA) Federal or State Disaster Declarations for Heat

No USDA Disaster Declarations for Heat

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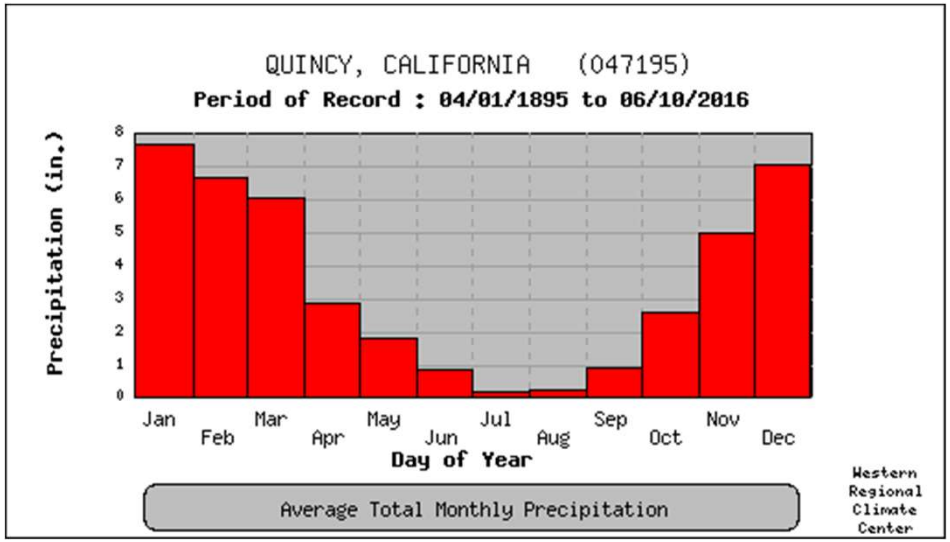
Severe Weather: Heavy Rains and Storms

Quincy Weather Station

Plumas County (WRCC) Monthly Average Total Precipitation



Source: Western Regional Climate Center: 1895 to 2016

Plumas County (NWS) 24 Hour Rainfall Extremes

Rainfall in Inches	Date
9.00	12/31/2004
6.71	10/25/2021
6.50	3/18/1907
6.10	10/13/1962
5.33	12/22/1964
5.32	2/24/1904
5.30	3/17/1907
5.25	12/11/1937
5.17	12/11/1937
5.05	11/23/2024

Source: National Weather Service – *1885 to 2025*

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Severe Weather: Heavy Rain and Storms

Past Occurrences

Plumas County Disaster Declarations from Heavy Rains and Storms 1950 -2025

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Flood (including heavy rains and storms)	22	1950, 1955, 1958 (twice), 1964, 1963, 1964, 1969, 1970 1980, 1986, 1993, 1992, 1995 (twice), 1996, 1997, 2006, 2017 (twice), 2023 (twice)	19	1950, 1955, 1958 (twice), 1963, 1964, 1969, 1970, 1986, 1992 (twice), 1995 (twice), 1997, 2006, 2017 (twice), 2023 (twice)

USDA Declarations for Heavy Rains and Storms 2012-2024

- 1 Excessive rain / high winds / cold temperatures/ hail

Plumas County NCDC Heavy Rain and Storm Events 1/1/1950-7/31/2024

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
Hail	10	0	0	0	0	$100	$5,000
Heavy Rain	60	0	0	0	0	$1,000	$0
Winter Weather	61	0	0	0	0	$0	$0
Total	131	0	0	0	0	$1,100	$5,000

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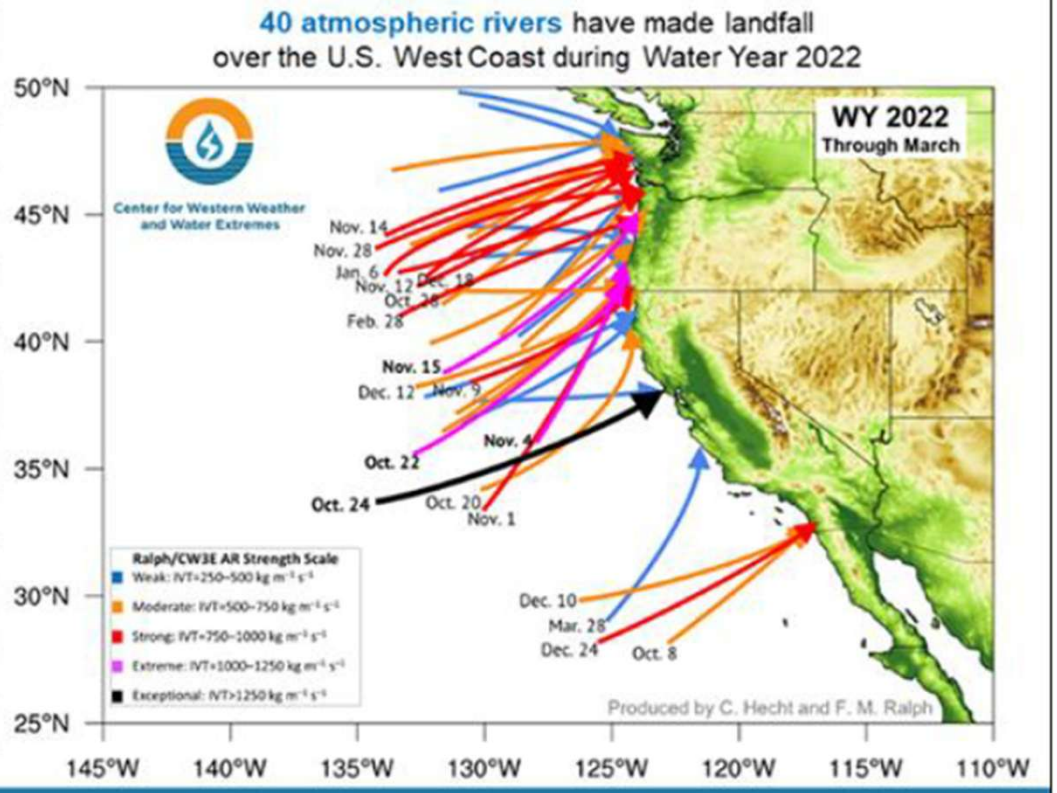
Severe Weather: Heavy Rain and Storms/ Flood

Atmospheric Rivers

2022 Events

AR Strength	AR Count
Weak	11
Moderate	15
Strong	10
Extreme	3
Exceptional	1

Regions Impacted by Each AR	
State/Region	AR Conditions
Washington	36
Oregon	36
Northern CA	26
Central CA	15
Southern CA	11



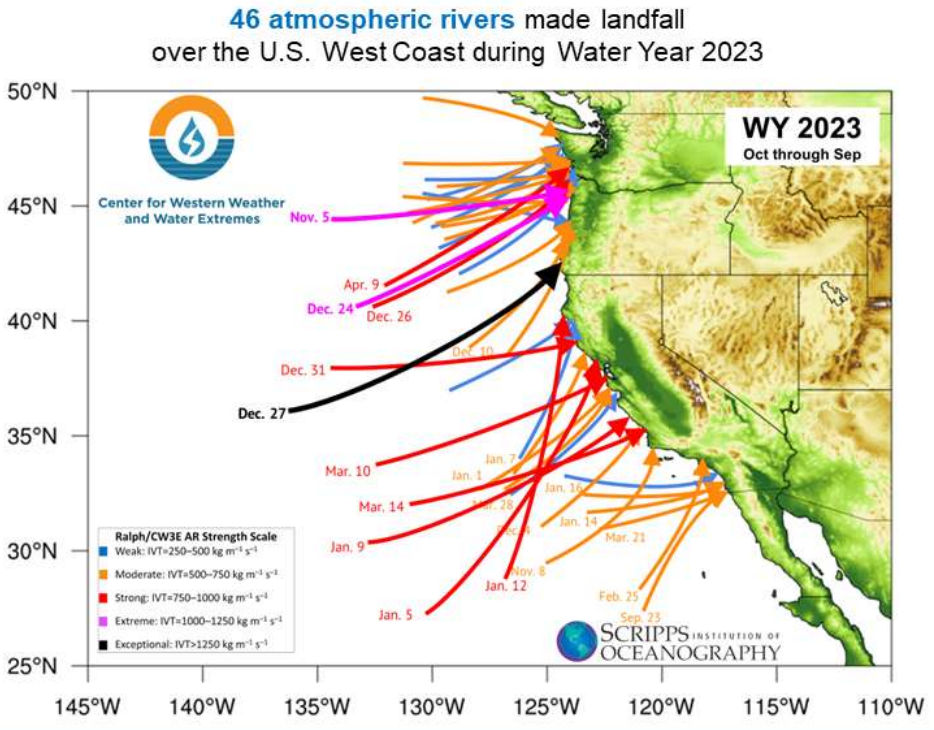
Severe Weather: Heavy Rain and Storms/ Flood

Atmospheric Rivers

2023 Events

AR Strength	AR Count
Weak	12
Moderate	22
Strong	9
Extreme	2
Exceptional	1

Regions Impacted by Each AR	
State/Region	AR Conditions
Washington	34
Oregon	37
Northern CA	32
Central CA	21
Southern CA	17



CW3E Center for Western Weather and Water Extremes

*Arrows are placed on the map where each AR was strongest over the coast

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Severe Weather: Heavy Rain and Storms/ Flood

Atmospheric Rivers

2024 Events

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Severe Weather: High Winds and Tornadoes

Plumas County NCDC High Wind and Tornado Events 1/1/1950-7/31/2024

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
High Wind	88	0	0	1	0	$2,245,500	$0
Strong Wind	4	0	0	0	0	$63,300	$0
Thunderstorm Wind	2	0	0	0	0	$675,000	$0
Total	94	0	0	1	0	$2,983,800	$ 0

No FEMA State or Federal Disaster Declarations for High Winds or Tornadoes

USDA Declarations for High Winds 2012-2024

- 1 Excessive rain / high winds / cold temperatures/ hail

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Agricultural Hazards (Severe Weather/ Invasive Species (Pests and Weeds)

Plumas Farmland Inventory – 2000/2023

Land Category	2000 Acres	2023 Acres	2000-2023 NET ACREAGE CHANGED
Timberland	1,086,526	1,000,000	-86,526
Rangeland	65000	96,079	31,079
Irrigated Pastureland	87,000	17,698	-69,302
Prime Farmland	12,950	14,254	1304
Total Area Inventoried	1,251,476	1,128,031	-123,445

Plumas– Value of Agricultural Production 2020-2023

Crop	2020	2021	2022	2023
Cattle	$10,333,472	$11,469,650	$13,618,183	$14,283,654
Sheep, Goats, Hogs	$205,207	$1,504,632	$295,385	$148,690
Apiary & Poultry	$118,686	$91,259	$142,032	$184,456
Field Crops	$10,668,522	$9,629,960	$12,732,536	$8,802,806
Organic Production	$55,358	$70,301	$82,937	$89,560
Specialty Crops	$9,265,404	$3,443,947	$311,459	$311,807
Forestry	$16,666,220	$21,790,520	$24,067,294	$14,810,383
Total	$47,314,889	$48,002,290	$51,251,848	$38,541,746

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Agricultural Hazards (Severe Weather/ Invasive Species (Pests and Weeds)

AG Hazards: According to the USDA, every year natural disasters, such as droughts, earthquakes, extreme heat and cold, floods, fires, earthquakes, hail, landslides, and tornadoes, challenge agricultural production. Because agriculture relies on the weather, climate, and water availability to thrive, it is easily impacted by natural events and disasters.

Hazards of Significant Concern to Plumas Ag Industry:

- Drought
- Freeze
- Insect Infestations

Weeds of Concern (both invasive and native)

Weeds of Concern					
Barb Goatgrass	Jointed Goatgrass	Medusahead	Yellow Starthistle	Scotch thistle	Musk Thistle
Scotch Broom	French Broom	Tree of Heaven	Perennial pepperweed	Spotted knapweed	Diffuse Knapweed
Rush Skeletonweed	Musk thistle	Himalayan blackberry	Leafy Spurge	Dalmatian Toad Flax	Puncture vine
Euphorbia	Stinkwort	Saltcedar	Hounds Tongue	Spanish Broom	Dyer's Woad

Invasive Species (Animal Pests): animal groups like wild pigs are causing extensive damage to both residential areas and also agricultural areas. However, feral hog herds are not prevalent in Plumas County at this time.

Invasive Species (Insect Pests): Insects of concern to plants and crops include the Spongy Moth, Japanese Beetle, and European Pine Shoot Moth. Bark Beetles and Clear Wing Grasshoppers can also cause great destruction of crops within Plumas County.

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Climate Change

North Sierra Region

and Plumas County Planning Area

Cal Adapt Climate Projections

Effect	Ranges
Temperature Change, 1990-2100	January increase in average temperatures: 2.5 °F to 4°F by 2050 and 6°F to 7°F by 2100. The largest changes are observed in the southern part of the region. July increase in average temperatures: 4 °F to 5°F by 2050 and I 0°F by the end of the century, with the greatest change in the northern part of the region. (Modeled average temperatures; high emissions scenario)
Precipitation	Precipitation decline is projected throughout the region. The amount of decrease varies from 3 to 5 inches by 2050 and 6 inches to more than 10 inches by 2100, with the larger rainfall reductions projected for the southern portions of the region. (CCSM3 climate model; high carbon emissions scenario)
Heat wave	Heat waves are defined as five consecutive days over 83 °F to 97°F depending on location. By 2050, the number of heat waves per year is expected to increase by two. A dramatic increase in annual heat waves is expected by 2100, eight to 10 more per year.
Snowpack	Snowpack levels are projected to decline dramatically in many portions of the region. In southern portions of the region, a decline of nearly 15 inches in snowpack levels - a more than 60 percent drop - is projected by 2090. (CCSM3 climate model; high carbon emissions scenario)
Wildfire	Wildfire risk is projected to increase in a range of 1.1 to 10.5 times throughout the region, with the highest risks expected in the northern and southern parts of the region. (GFDL climate model; high carbon emissions scenario)

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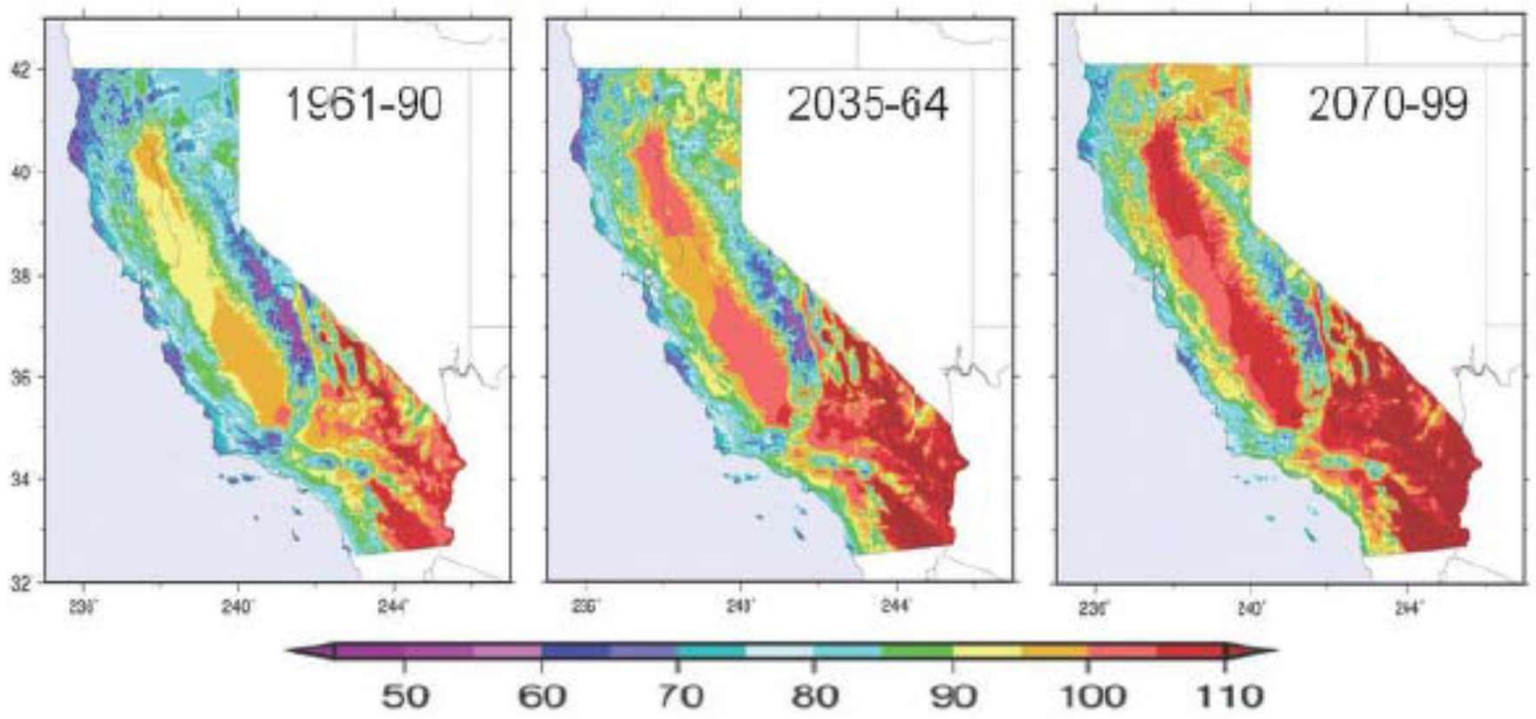
Climate Change

California

Historical and Projected Temperature Increases 1961 to 2099



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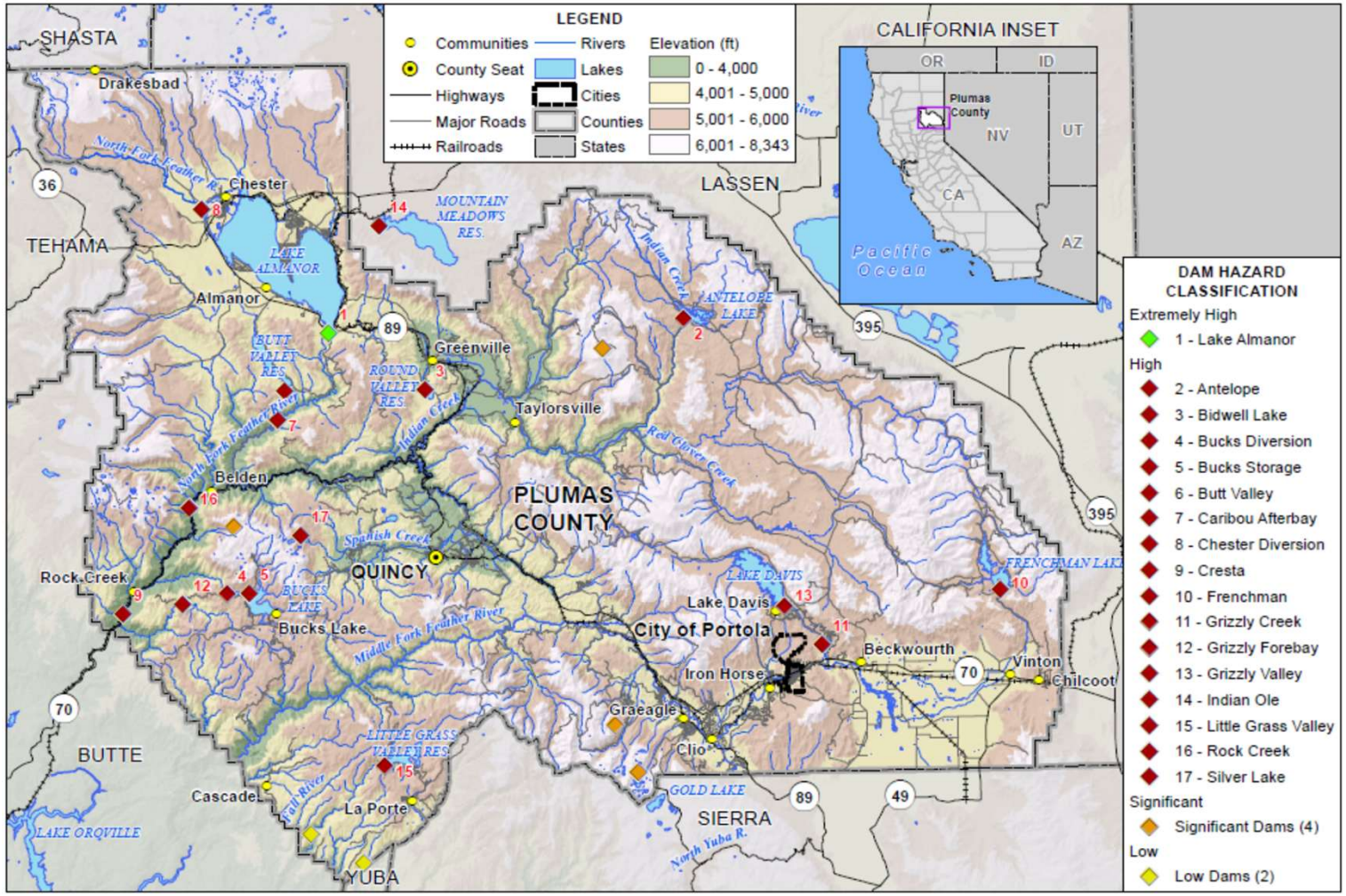
Dam Failure

Plumas County Planning Area*

Dam Inventory

Extremely High (1)
High (16)
Significant (1)
Low (1)

*Indian Ole is the only dam outside of Plumas in Lassen County



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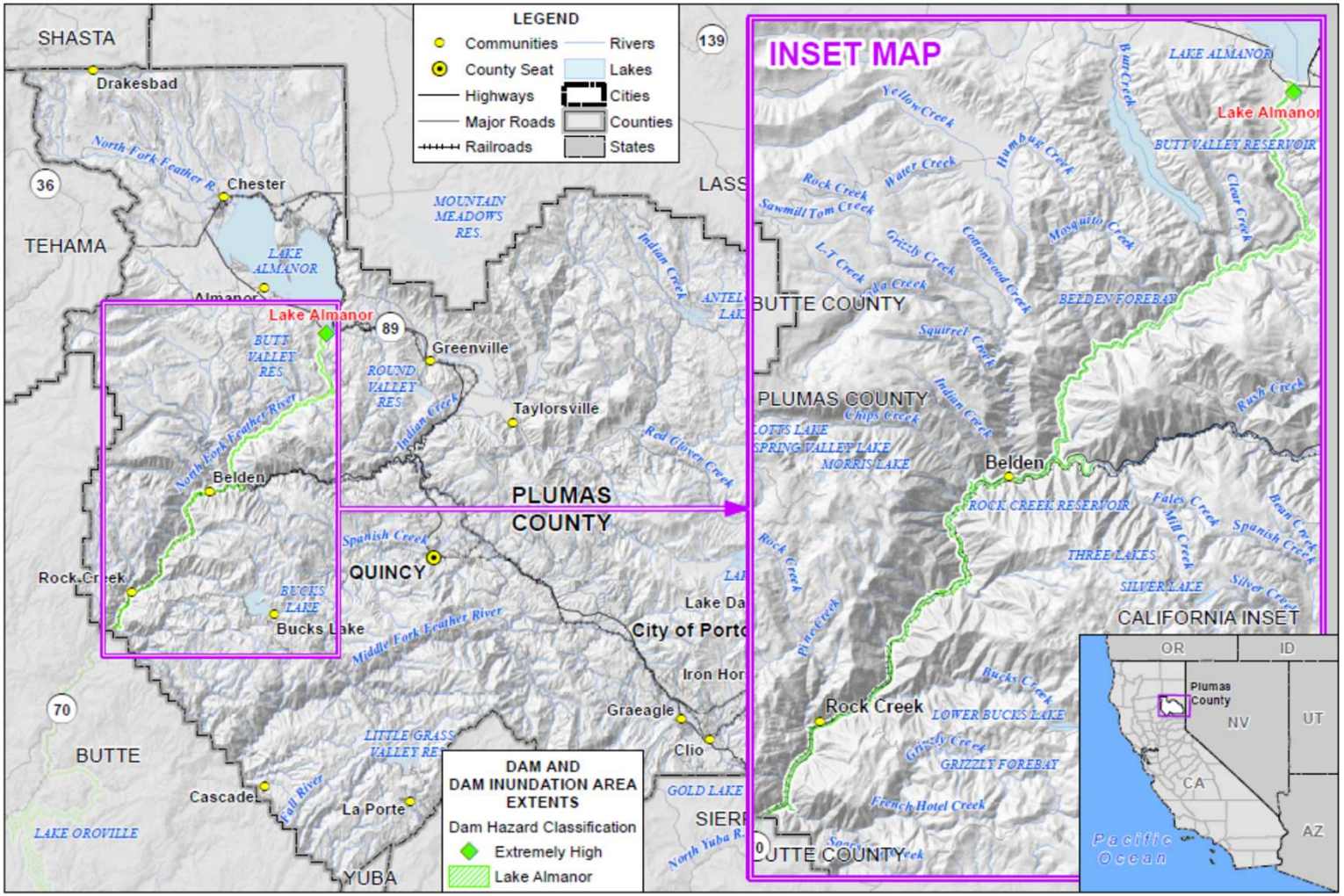
Dam Failure

Plumas County Planning Area

Dam Inundation

Extremely High Hazard Dams



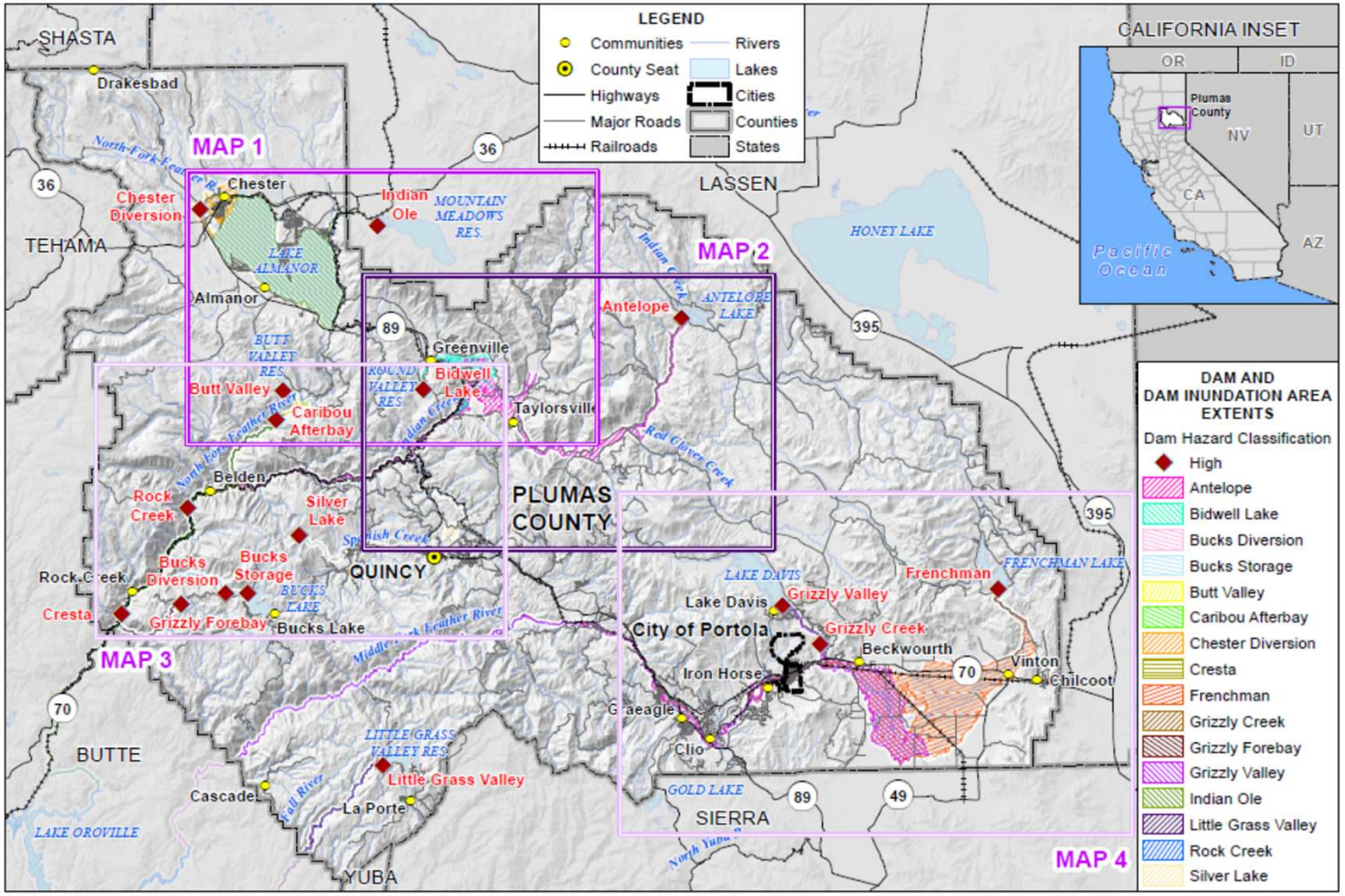
FOSTER MORRISON CONSULTING

Dam Failure

Plumas County Planning Area

Dam Inundation

High Hazard Dams
(Map 0)



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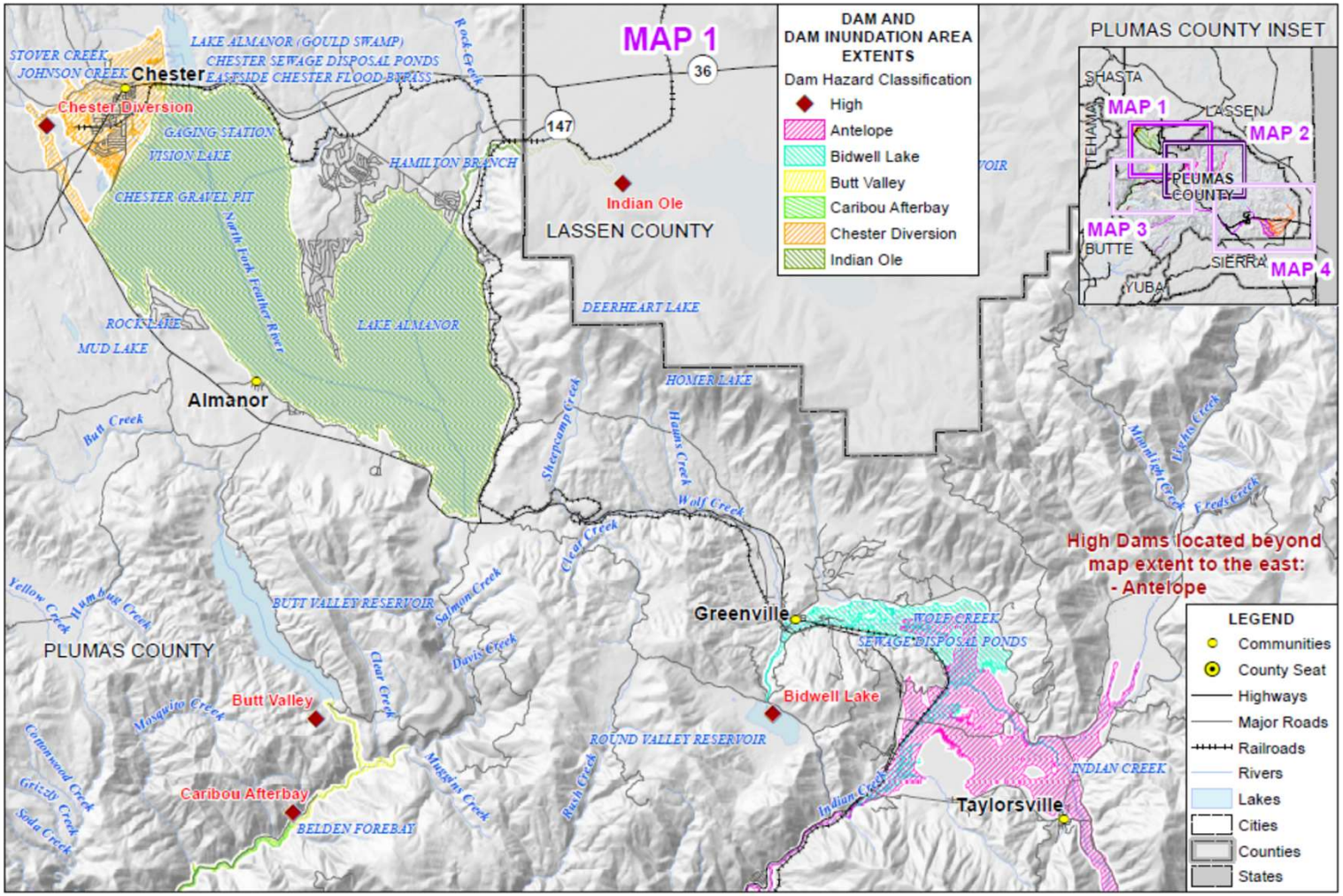
Dam Failure

Plumas County Planning Area

Dam Inundation

High Hazard Dams (Map 1)



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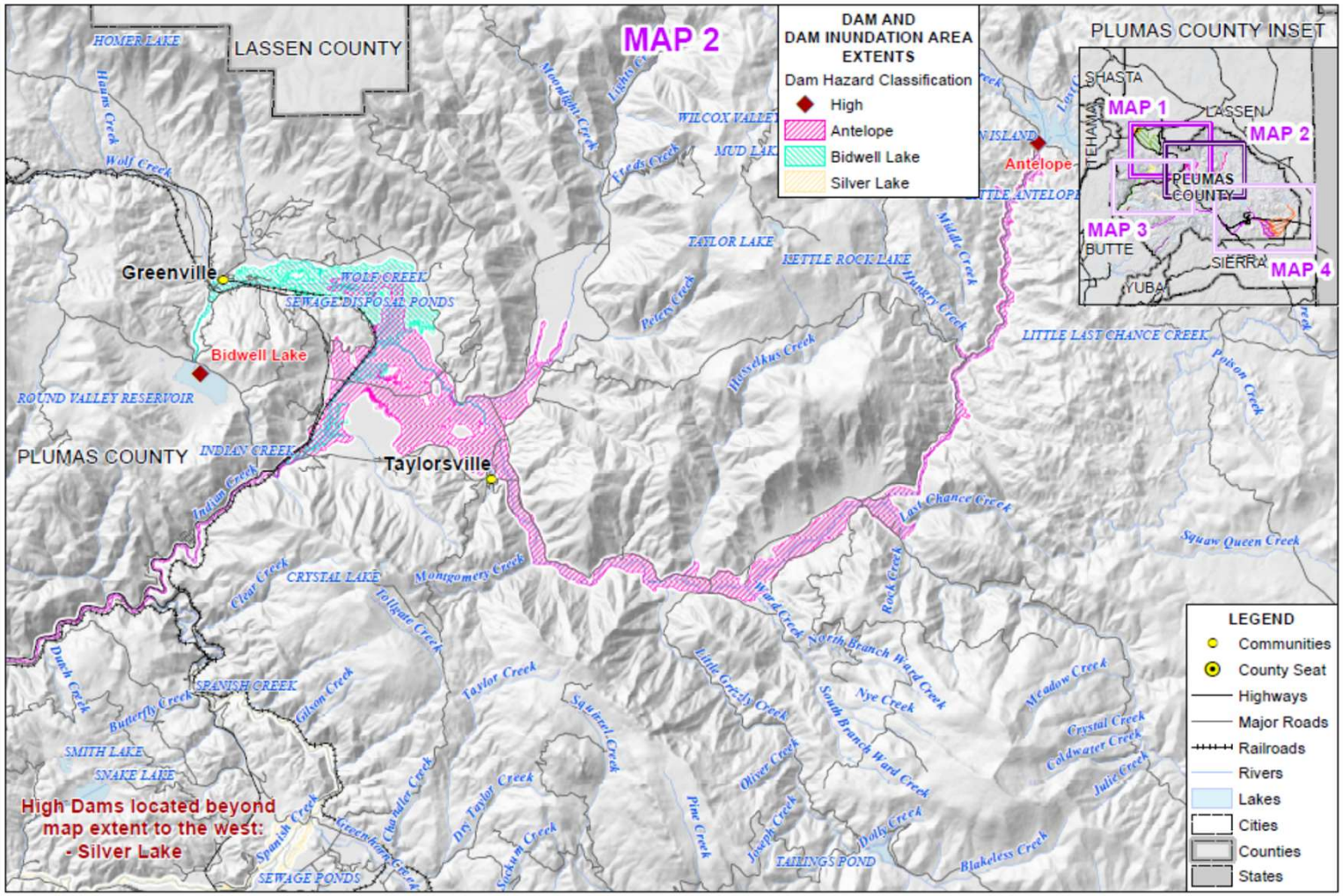
Dam Failure

Plumas County Planning Area

Dam Inundation

High Hazard Dams (Map 2)



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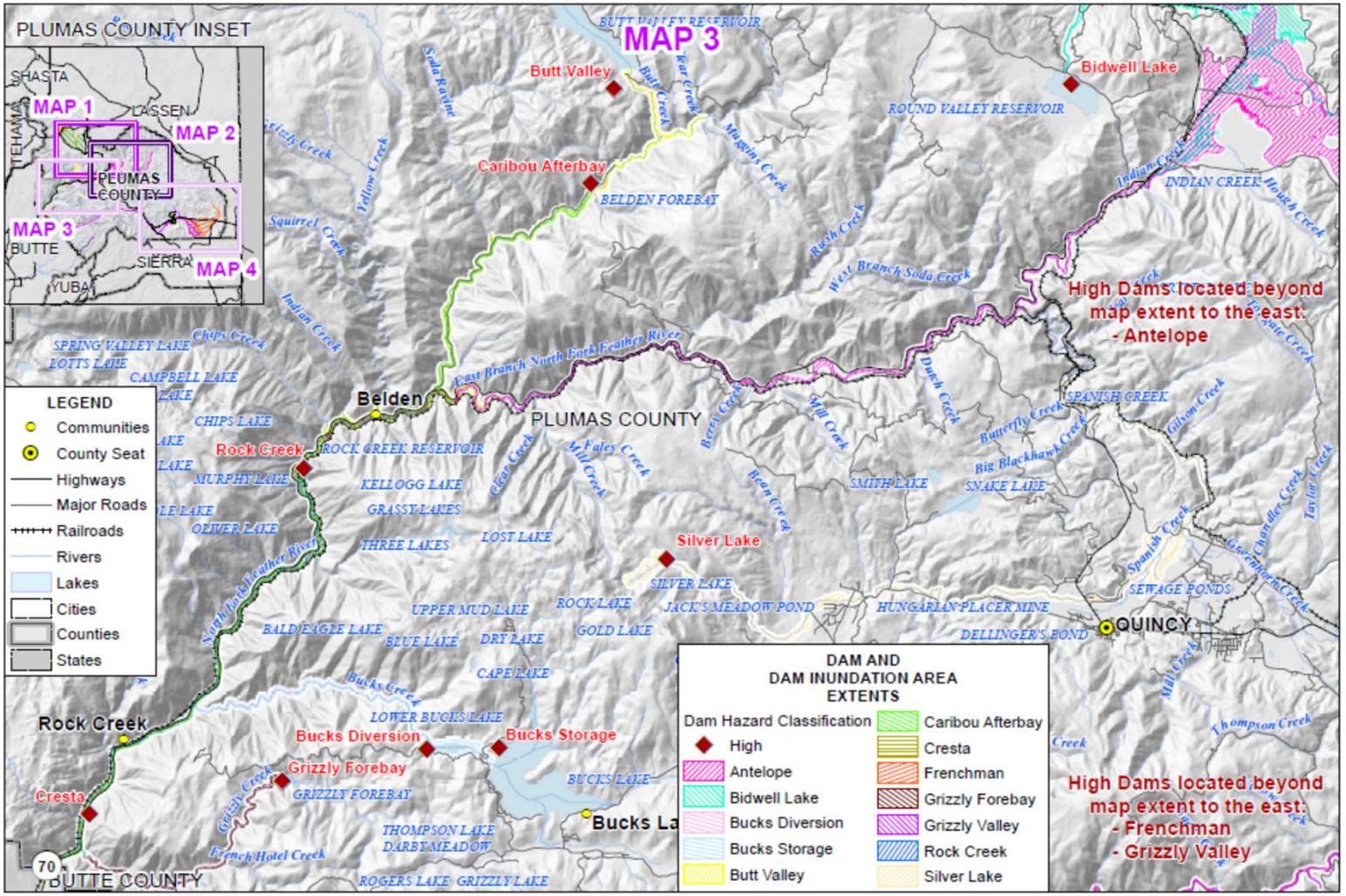
Dam Failure

Plumas County Planning Area

Dam Inundation

High Hazard Dams (Map 3)



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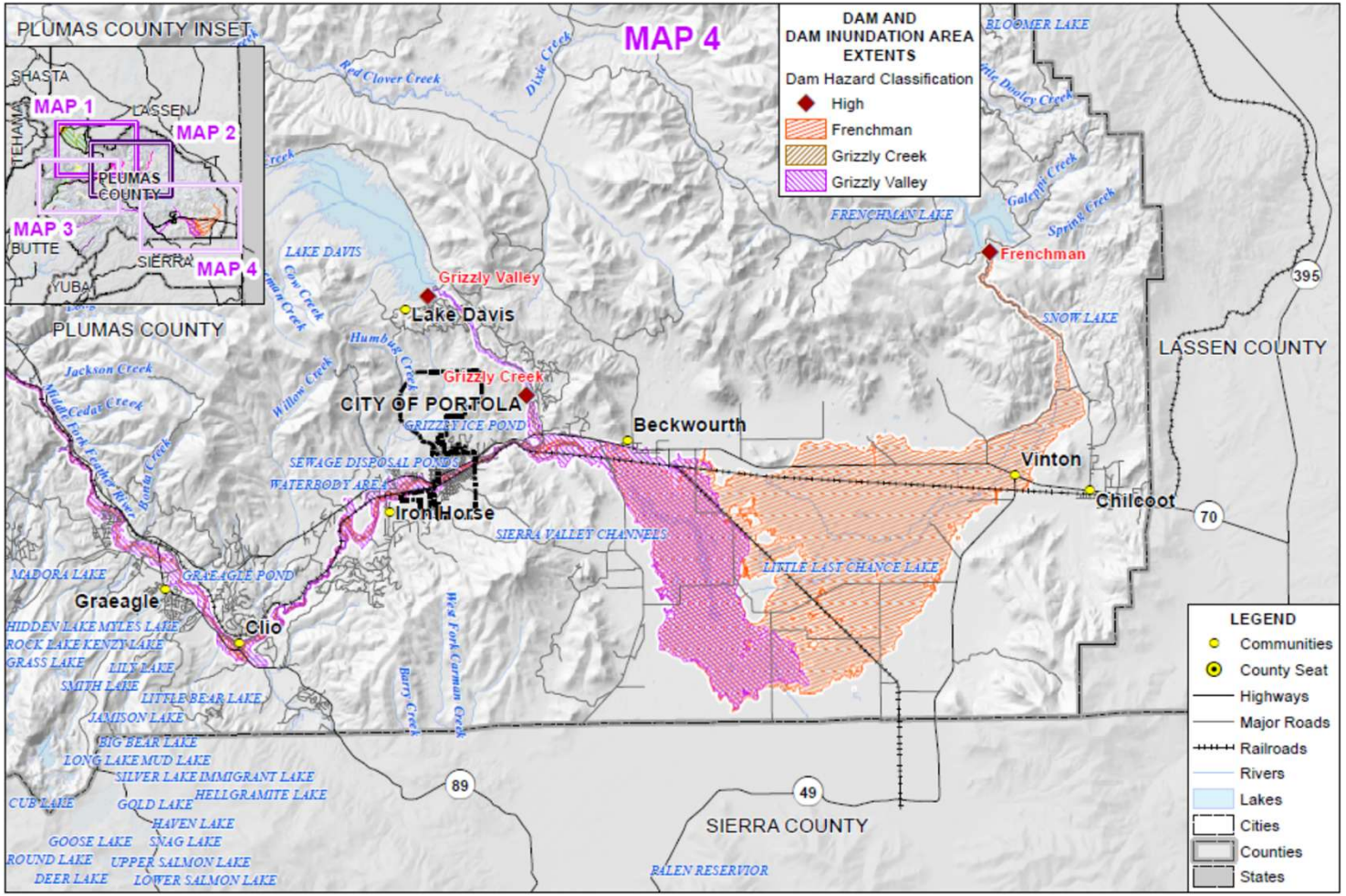
Dam Failure

Plumas County Planning Area

Dam Inundation

High Hazard Dams
(Map 4)



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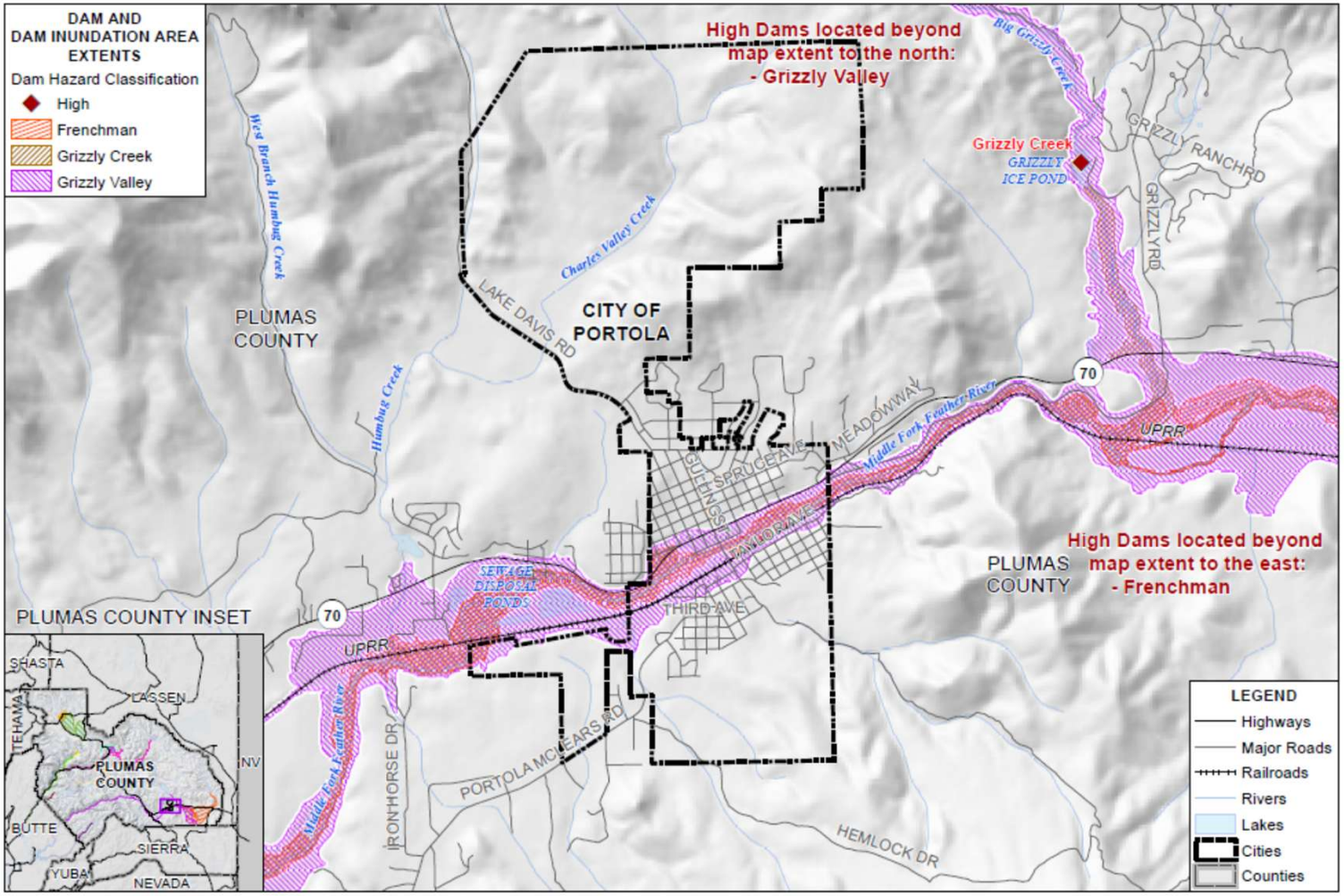
Dam Failure

Portola

Dam Inundation

High Hazard Dams

(Portola does not have an EH Hazard Dam inundation)



FOSTER MORRISON CONSULTING

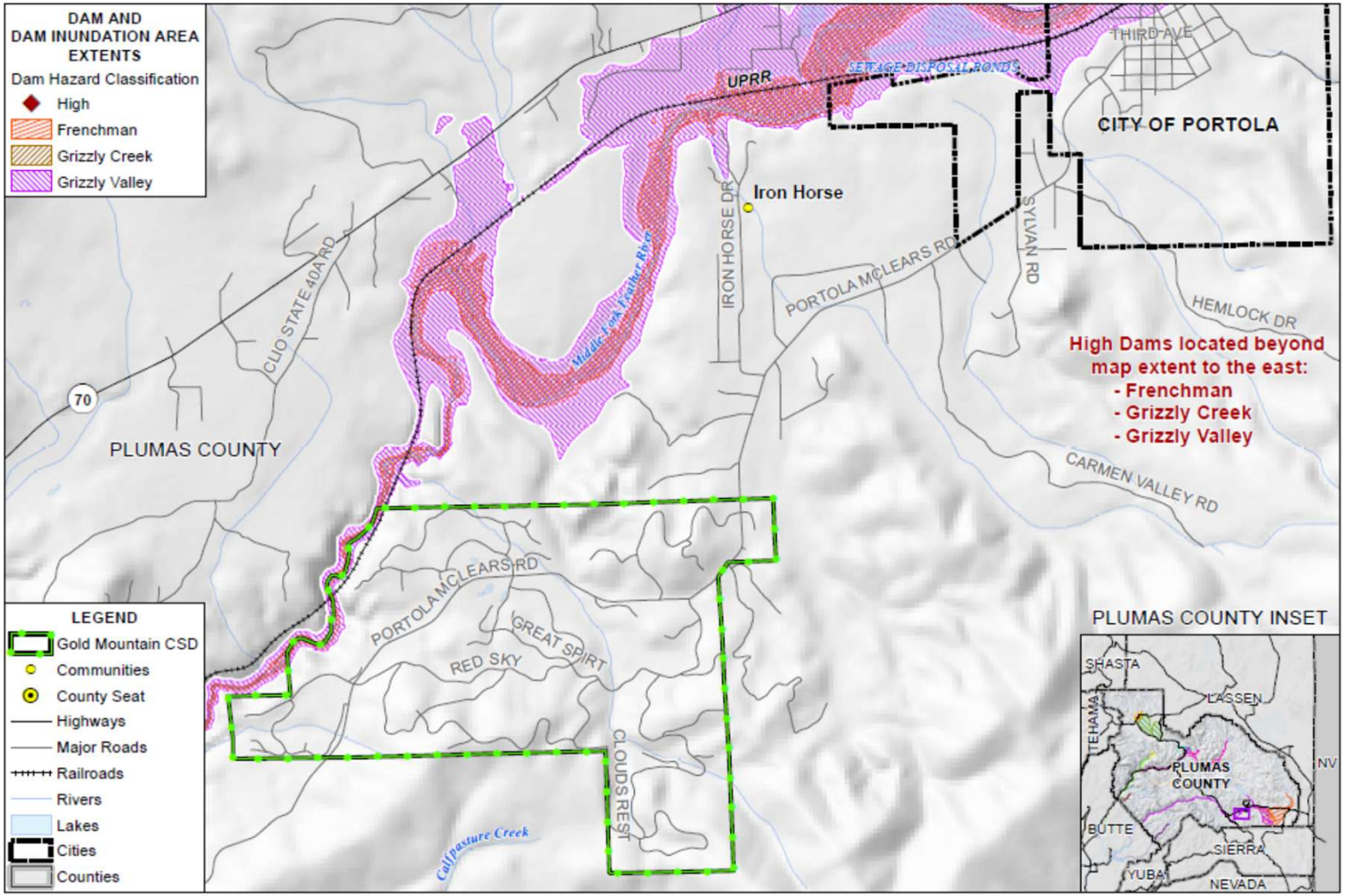
Dam Failure

Gold Mountain CSD

Dam Inundation

High Hazard Dams

(Gold Mountain CSD does not have an EH Hazard Dam inundation)



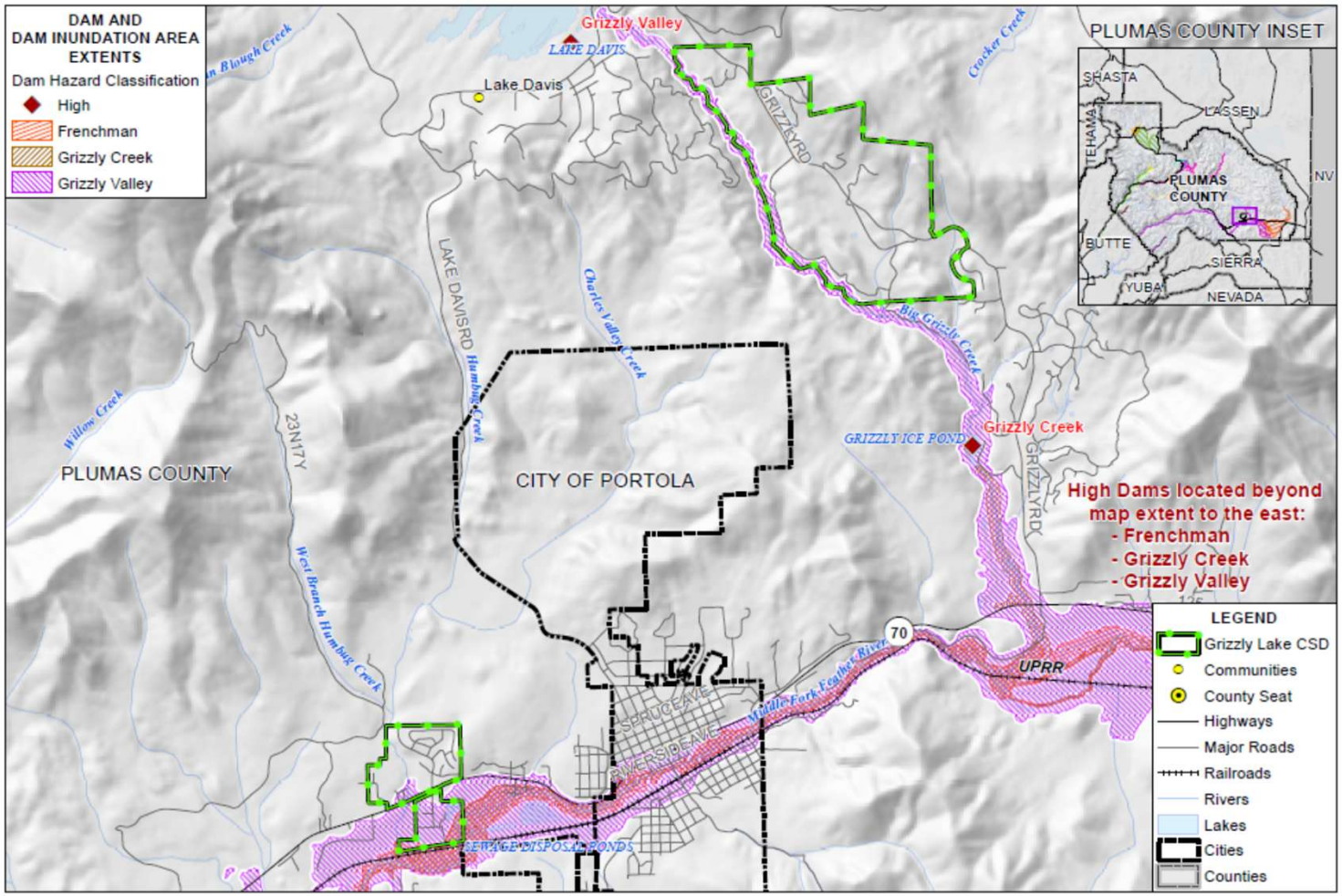
FOSTER MORRISON CONSULTING

Dam Failure

Grizzly Lake CSD
Dam Inundation

High Hazard Dams

(Grizzly Lake CSD does not have an EH Hazard Dam inundation)



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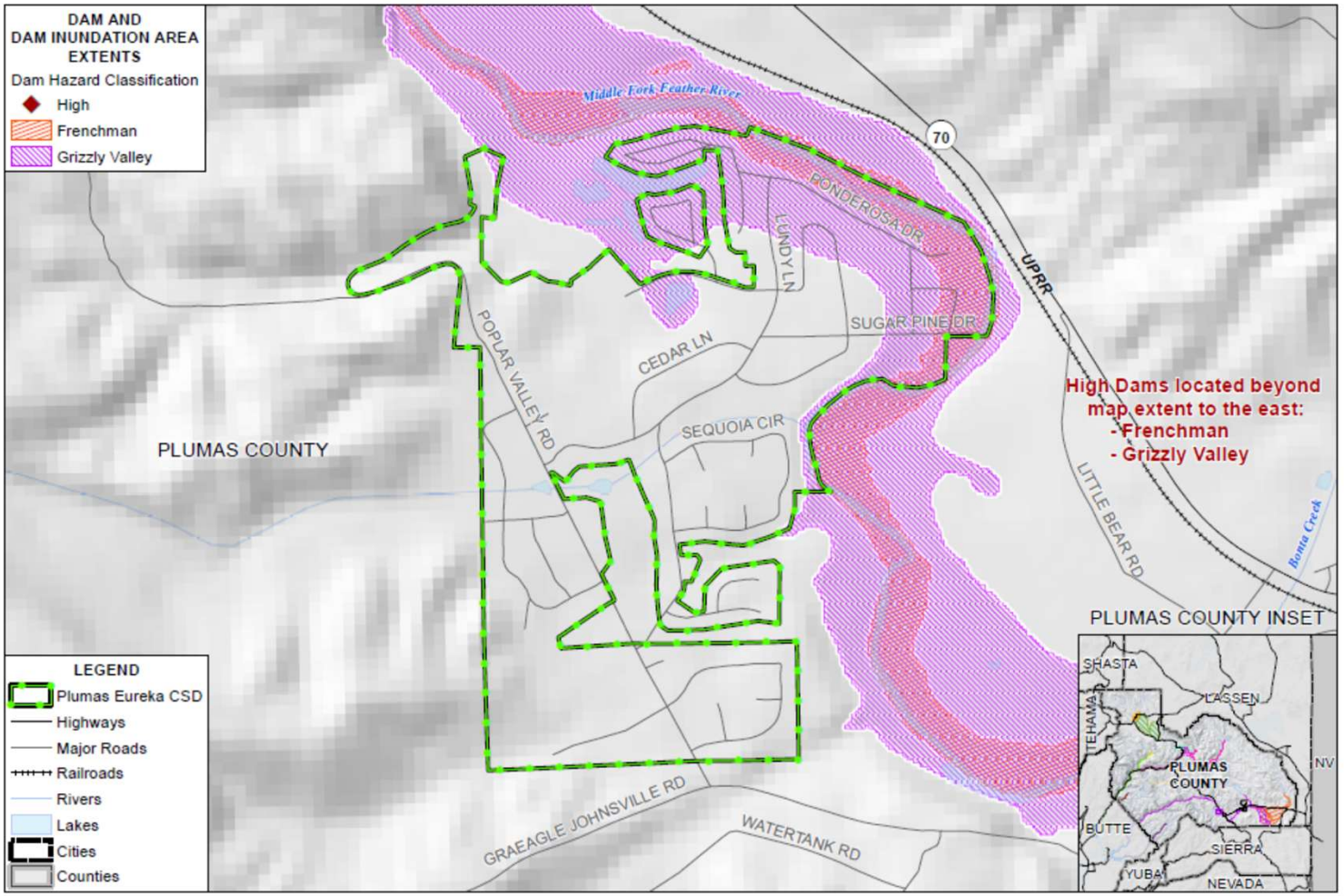
Dam Failure

Plumas Eureka CSD

Dam Inundation

High Hazard Dams

(Plumas Eureka CSD does not have an EH Hazard Dam inundation)



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Dam Failure

Plumas County Planning Area

Extremely High and High Hazard Dams

Geographic Extents

Extremely High Hazard/Dam Inundation Area	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Lake Almanor	2,355	0.1%	19	0.02%	2,337	0.1%

High Hazard/Dam Inundation Area	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Antelope	9,462	0.57%	2,607	2.80%	6,855	0.43%
Bidwell Lake	2,660	0.16%	509	0.55%	2,151	0.14%
Bucks Diversion	622	0.04%	2	0.002%	621	0.04%
Bucks Storage	833	0.05%	2	0.002%	831	0.05%
Butt Valley	1,648	0.10%	10	0.01%	1,638	0.10%
Caribou Afterbay	983	0.06%	7	0.01%	976	0.06%
Chester Diversion	2,781	0.17%	654	0.70%	2,127	0.13%
Cresta	44	0.003%	0	0.0%	44	0.003%
Frenchman	34,129	2.04%	16,769	18.03%	17,360	1.10%
Grizzly Creek	670	0.04%	85	0.09%	586	0.04%
Grizzly Forebay	192	0.01%	0	0.0%	192	0.01%
Grizzly Valley	16,517	0.99%	3,085	3.32%	13,431	0.85%
Indian Ole	25,743	1.54%	5	0.01%	25,738	1.63%
Little Grass Valley	523	0.03%	0	0.0%	523	0.03%
Rock Creek	571	0.03%	1	0.001%	571	0.04%
Silver Lake	971	0.06%	299	0.32%	672	0.04%

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Dam Failure

Plumas County Planning Area

Extremely High Hazard Dams

Parcels, Structures, and Values at Risk

Planning Area Summary by Dam

Dam Inundation Area	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
Lake Almanor	47	12	$1,493,588	$2,266,764	$62,488	$2,049,844	$5,872,684

Unincorporated Plumas County by Property Use

Dam Inundation / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
Lake Almanor							
Agricultural	2	0	$55,771	$0	$0	$0	$55,771
Commercial	4	3	$109,485	$1,736,350	$56,350	$1,736,350	$3,638,535
Federal Lands	9	0	$0	$0	$0	$0	$0
Government	2	0	$0	$0	$0	$0	$0
Industrial	0	0	$0	$0	$0	$0	$0
Institutional	0	0	$0	$0	$0	$0	$0
Miscellaneous	1	0	$3,716	$0	$0	$0	$3,716
Recreational	1	1	$122,330	$96,574	$638	$96,574	$316,116
Residential	22	8	$1,202,286	$433,840	$5,500	$216,920	$1,858,546
ROW/Utilities	6	0	$0	$0	$0	$0	$0
Unincorporated Plumas County Total	47	12	$1,493,588	$2,266,764	$62,488	$2,049,844	$5,872,684

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Dam Failure

Unincorporated Plumas County

High Hazard Dams

Parcels, Structures, and Values at Risk

By Dam

Dam Inundation Area	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
Antelope	445	203	$32,907,880	$41,089,602	$2,946,487	$24,732,037	$101,676,006
Bidwell Lake	276	63	$16,141,238	$12,518,086	$773,289	$9,227,265	$38,659,878
Bucks Diversion	7	1	$64,771	$44,198	$0	$44,198	$153,167
Bucks Storage	10	1	$64,771	$44,198	$0	$44,198	$153,167
Butt Valley	32	6	$588,715	$1,940,477	$56,350	$1,838,414	$4,423,956
Caribou Afterbay	23	5	$211,447	$1,874,126	$56,350	$1,805,238	$3,947,161
Chester Diversion	1,496	1,167	$73,477,181	$200,553,635	$25,417,370	$121,650,730	$421,098,916
Cresta	1	0	$0	$0	$0	$0	$0
Frenchman	487	187	$47,205,467	$43,065,368	$2,913,406	$30,157,820	$123,342,061
Grizzly Creek	188	59	$11,183,050	$14,622,880	$65,215	$10,508,935	$36,380,080
Grizzly Forebay	6	0	$59,280	$0	$0	$0	$59,280
Grizzly Valley	1,207	667	$78,302,639	$136,953,183	$914,730	$90,820,304	$306,990,856
Indian Ole	193	143	$70,765,788	$74,205,539	$3,608	$37,102,770	$182,077,705
Little Grass Valley	7	0	$86,653	$0	$0	$0	$86,653
Rock Creek	8	1	$64,771	$44,198	$0	$44,198	$153,167
Silver Lake	122	64	$8,144,051	$10,846,489	$49,550	$5,859,745	$24,899,835

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Dam Failure

Plumas County Planning Area

Extremely High and High Hazard Dams

Populations at Risk by Dam Inundation Area by Jurisdiction

Dam Inundation Area	City of Portola		Unincorporated Plumas County	
	Improved Residential Parcels	Population	Improved Residential Parcels	Population
Extremely High Hazard Dams				
Lake Almanor	0	0	8	19
High Hazard Dams				
Antelope	0	0	170	406
Bidwell Lake	0	0	45	108
Bucks Diversion	0	0	0	0
Bucks Storage	0	0	0	0
Butt Valley	0	0	3	7
Caribou Afterbay	0	0	3	7
Chester Diversion	0	0	1	2
Cresta	0	0	1,023	2,445
Eureka	0	0	0	0
Frenchman	13	30	108	258
Grizzly Creek	12	27	29	69
Grizzly Forebay	0	0	0	0
Grizzly Valley	82	188	396	946
Indian Ole (Lassen County)	0	0	143	342
Little Grass Valley	0	0	0	0
Rock Creek	0	0	0	0
Silver Lake	0	0	64	153

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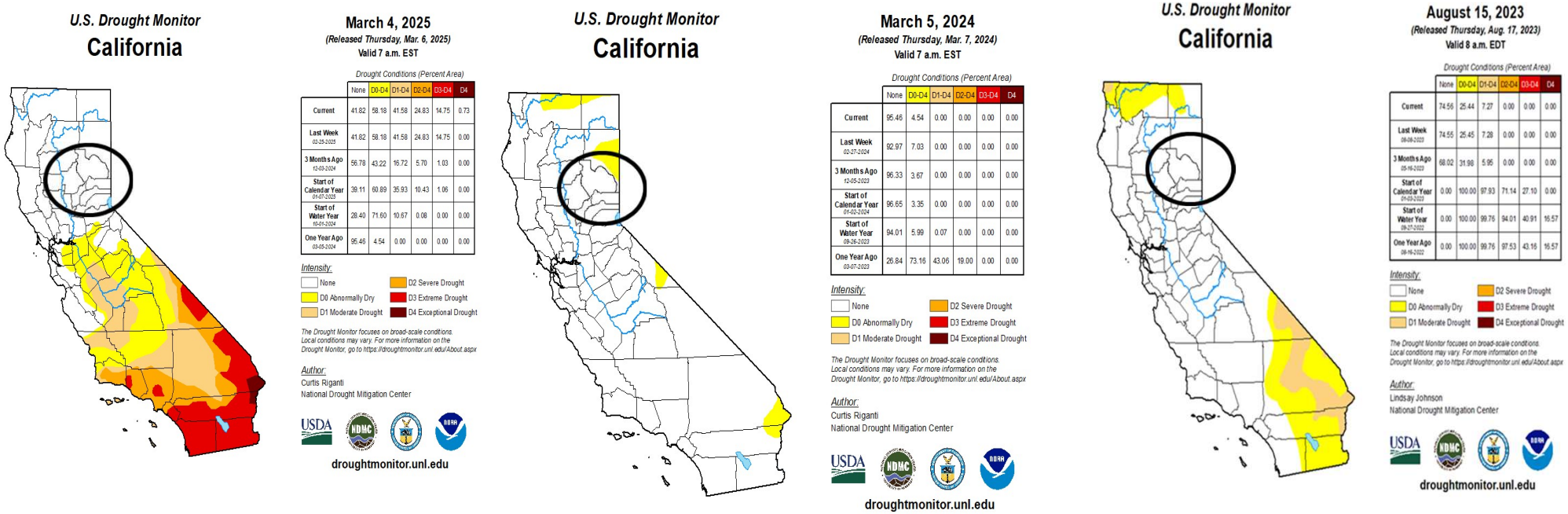
Drought and Water Shortage



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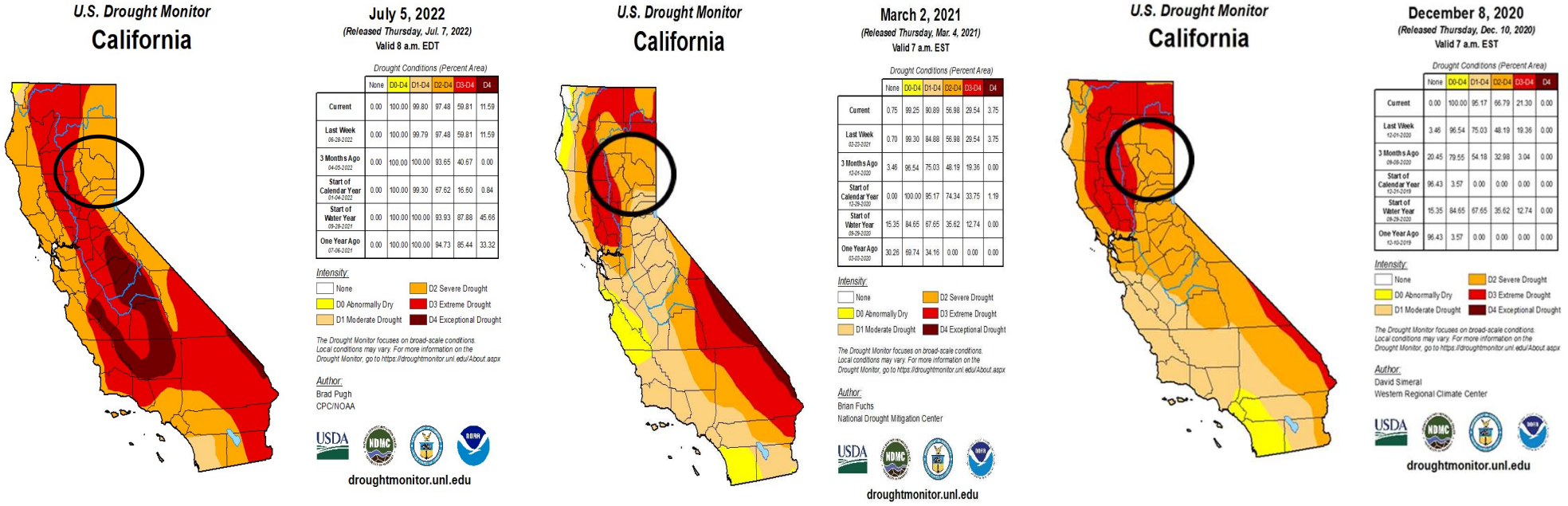
Drought and Water Shortage



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Drought and Water Shortage

U.S. Drought Monitor
California

April 9, 2019
(Released Thursday, Apr. 11, 2019)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

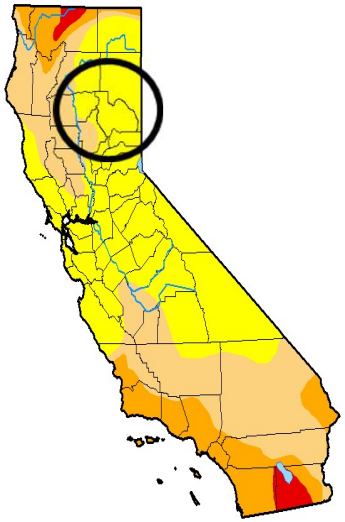
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	94.03	5.97	0.00	0.00	0.00	0.00
Last Week 04-02-2019	93.42	6.58	0.00	0.00	0.00	0.00
3 Months Ago 01-08-2019	7.77	92.23	75.17	14.12	1.55	0.00
Start of Calendar Year 01-01-2019	7.77	92.23	75.17	14.12	2.10	0.00
Start of Water Year 09-25-2018	12.18	87.82	47.97	22.82	4.94	0.00
One Year Ago 04-10-2018	33.85	66.15	37.10	13.77	2.50	0.00

Intensity:
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Deborah Bathke
National Drought Mitigation Center

http://droughtmonitor.unl.edu/



U.S. Drought Monitor
California

November 13, 2018
(Released Thursday, Nov. 15, 2018)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

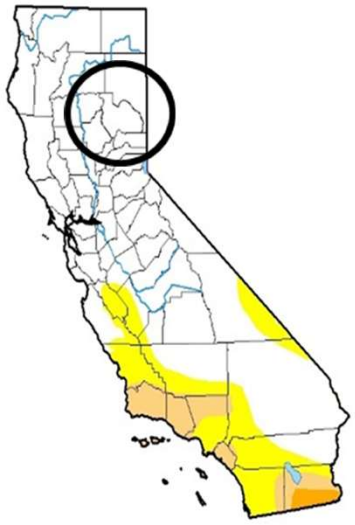
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	53.20	18.35	2.39	0.00
Last Week 11-06-2018	0.00	100.00	51.92	18.35	2.39	0.00
3 Months Ago 08-14-2018	13.84	86.16	47.19	20.75	2.77	0.00
Start of Calendar Year 01-02-2018	55.70	44.30	12.69	0.00	0.00	0.00
Start of Water Year 09-25-2018	12.18	87.82	47.97	22.82	4.94	0.00
One Year Ago 11-14-2017	73.98	26.02	8.24	0.00	0.00	0.00

Intensity:
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
David Simeral
Western Regional Climate Center

http://droughtmonitor.unl.edu/



U.S. Drought Monitor
California

July 25, 2017
(Released Thursday, Jul. 27, 2017)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.73	24.27	8.24	1.06	0.00	0.00
Last Week 07-18-2017	75.69	24.31	8.24	1.06	0.00	0.00
3 Months Ago 04-25-2017	76.54	23.46	8.24	1.06	0.00	0.00
Start of Calendar Year 01-03-2017	18.07	81.93	67.61	54.02	38.17	18.31
Start of Water Year 09-27-2016	0.00	100.00	83.59	62.27	42.80	21.04
One Year Ago 07-26-2016	0.00	100.00	83.59	59.02	42.80	21.04

Intensity:
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCEI/NOAA

http://droughtmonitor.unl.edu/

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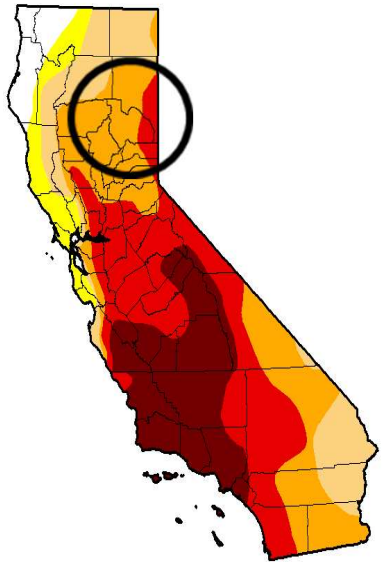
Drought and Water Shortage

U.S. Drought Monitor

California



May 3, 2016

(Released Thursday, May. 5, 2016)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4.27	95.73	89.68	74.37	49.15	21.04
Last Week 4/26/2016	4.24	95.76	90.09	74.37	49.15	21.04
3 Months Ago 2/2/2016	0.00	100.00	95.26	86.13	63.90	39.41
Start of Calendar Year 12/29/2015	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year 9/29/2015	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago 5/5/2015	0.14	99.86	98.28	93.91	66.60	46.77

Intensity:

D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

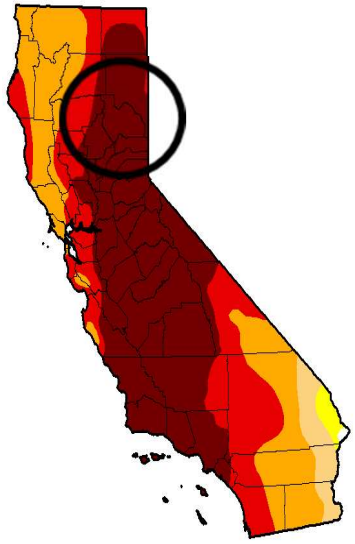
Author:

Brian Fuchs

National Drought Mitigation Center

U.S. Drought Monitor

California



June 16, 2015

(Released Thursday, Jun. 18, 2015)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	98.71	94.59	71.08	46.73
Last Week 6/9/2015	0.14	99.86	98.71	93.91	71.08	46.73
3 Months Ago 3/17/2015	0.16	99.84	98.11	93.44	67.46	39.92
Start of Calendar Year 12/30/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago 6/17/2014	0.00	100.00	100.00	100.00	76.69	32.98

Intensity:

D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

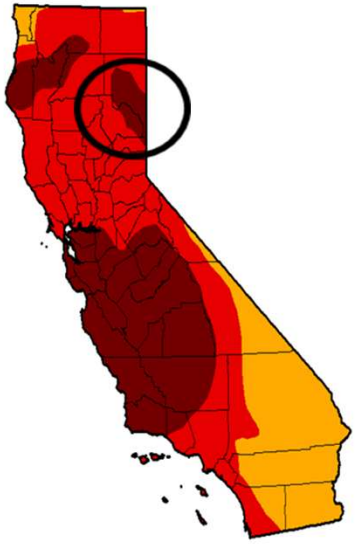
Richard Tinker

CPC/NOAA/NWS/NCEP

http://droughtmonitor.unl.edu/

U.S. Drought Monitor

California



June 17, 2014

(Released Thursday, Jun. 19, 2014)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	76.69	32.98
Last Week 6/10/2014	0.00	100.00	100.00	100.00	76.68	24.77
3 Months Ago 3/18/2014	0.01	99.99	99.80	93.08	71.78	22.37
Start of Calendar Year 12/31/2013	2.61	97.39	94.25	87.53	27.59	0.00
Start of Water Year 10/1/2013	2.63	97.37	95.95	84.12	11.36	0.00
One Year Ago 6/18/2013	0.00	100.00	98.21	67.07	0.00	0.00

Intensity:

D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Eric Luebehusen

U.S. Department of Agriculture

http://droughtmonitor.unl.edu/

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Drought and Water Shortage

Plumas County Disaster Declarations for Drought 1950-2025

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Drought	1	2014	1	1977

Plumas County USDA Drought Disaster Declarations 2012-2024

--6 Drought Events

Drought and Tree Mortality

There have been four (multi-year) tree mortality events in the County since 1980.

Plumas County NCDC Drought Events 1/1/1950-7/31/2024

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
Drought	2	0	0	0	0	$50,000	$0

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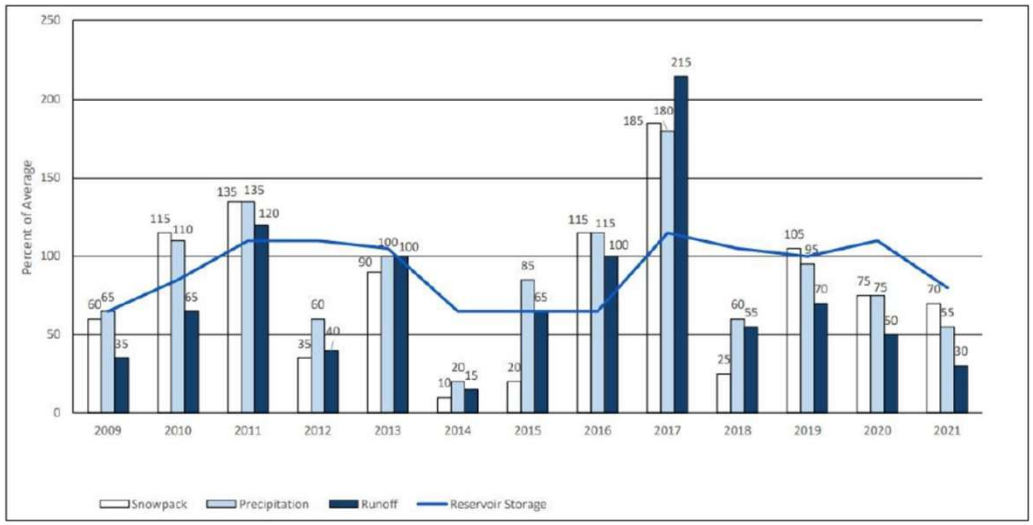
Drought and Water Shortage

California Water Supply Conditions, 2009 to 2021



Plumas County Drought Impacts 1850-5/1/2025

Category	Plumas County Number of Impacts
Agriculture	28
Business and Industry	11
Energy	8
Fire	16
Plants & Wildlife	30
Relief, Response, and Restrictions	69
Society and Public Health	28
Tourism and Recreation	13
Water Supply and Quality	67
Total	270

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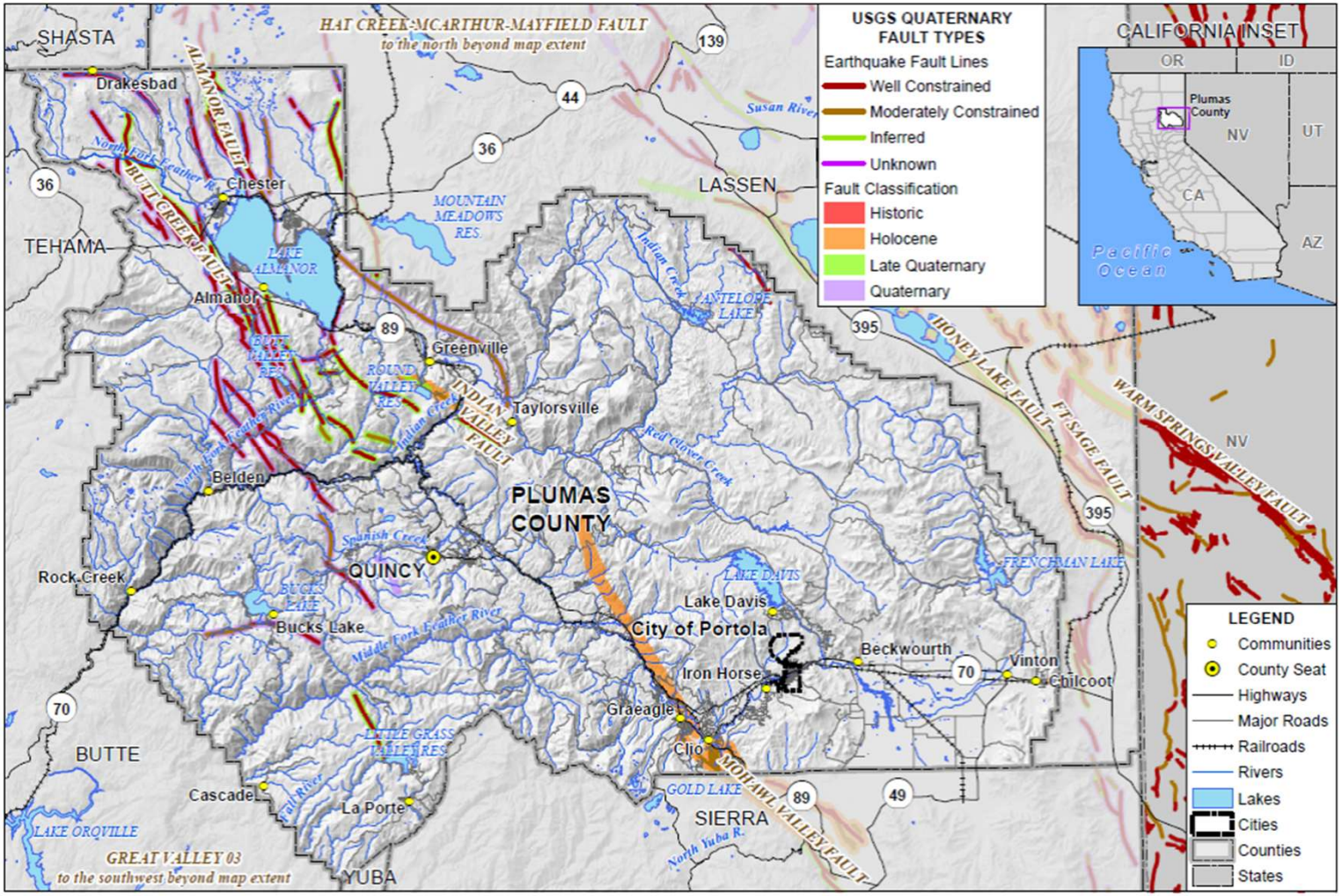
Earthquake Hazard

Plumas County Fault Map



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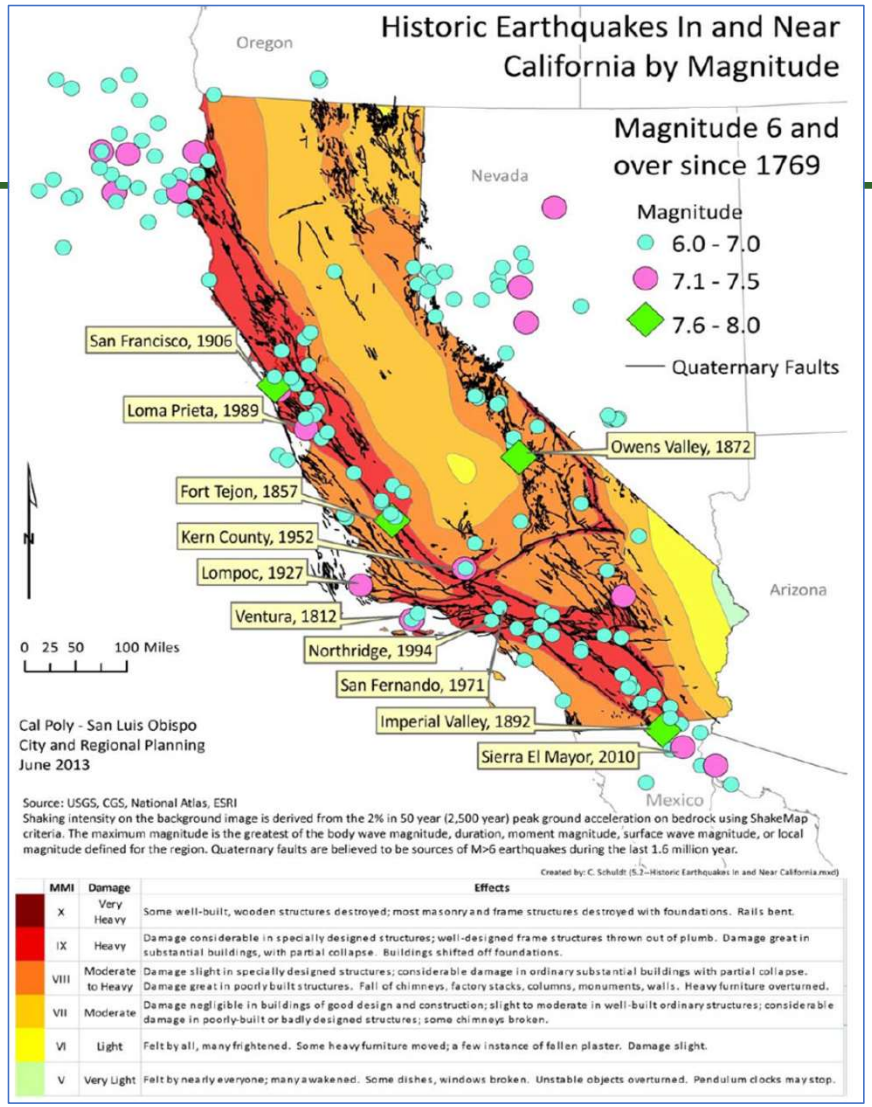
Earthquake

California

Magnitude 6 and Over Earthquakes (1769 – 2017)

Disaster Declaration History:
No State or Federal Disaster Declarations in Plumas County

USGS: 43 Magnitude 5.0 or greater earthquakes within 90 miles of Plumas (Portola)



Since 2017, California has experienced four additional 6.0 or greater earthquakes:

- **2022 - 6.4 Ferndal**
- **2021 - 6.0 Antelope Valley**
- **2019 - 6.4 and 7.1 Ridgecrest**

None of these earthquakes (over 6.0) since 2017 have affected the Plumas County Planning Area.

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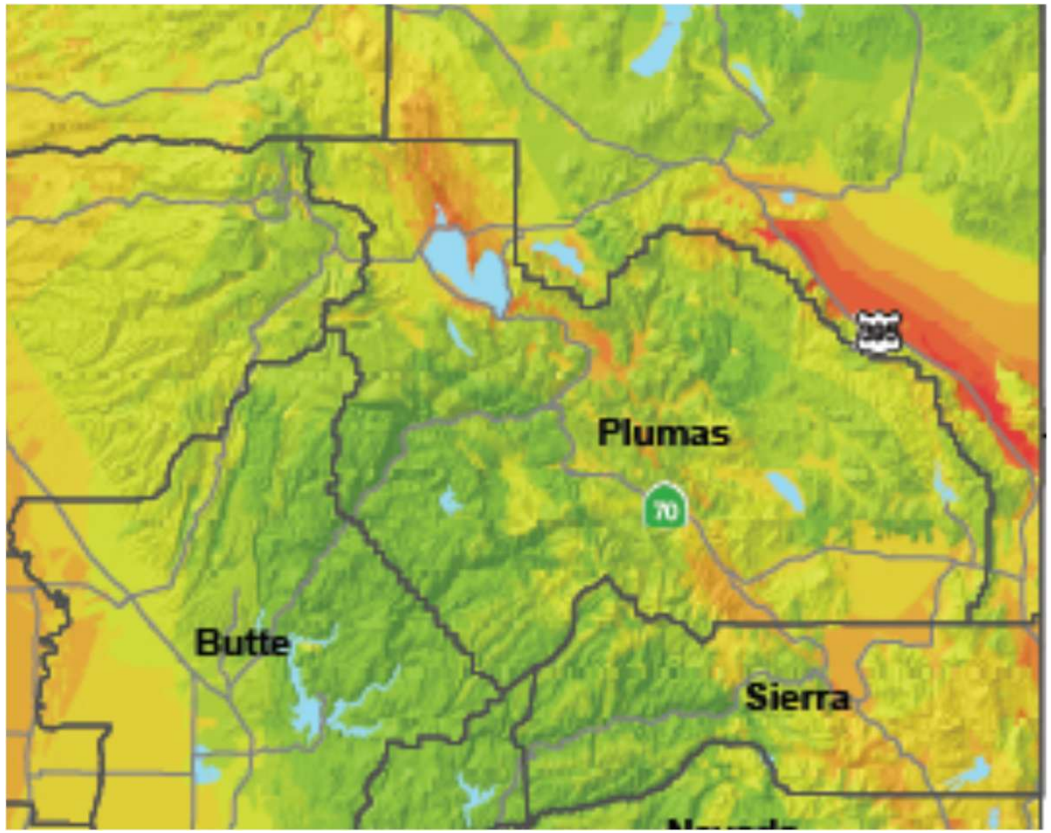
Earthquake

Probability of Earthquake - 2% in 50 year period or 2,500 year interval (CGS)

Plumas mostly has a low to moderate risk of earthquake



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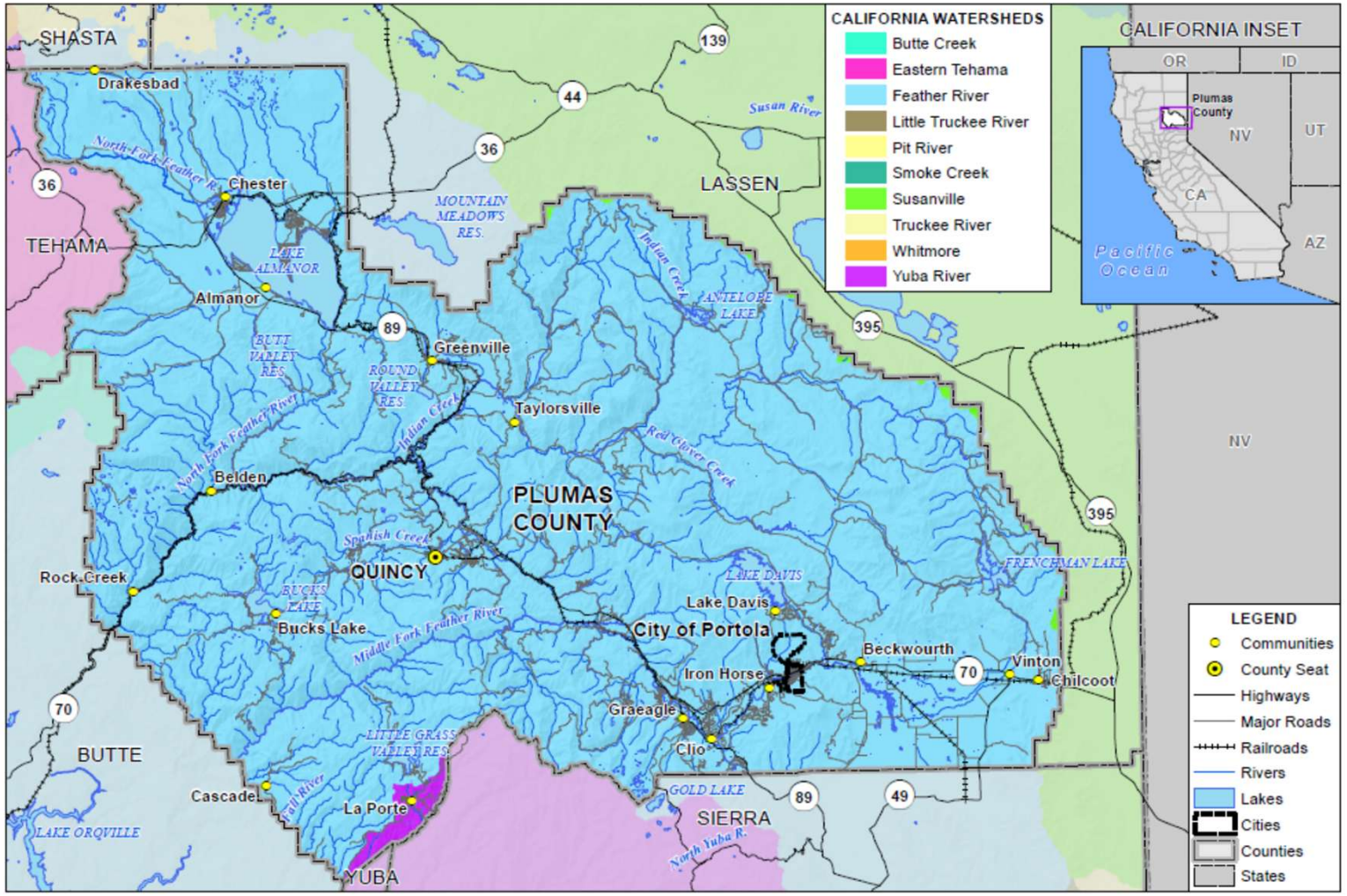
Flood

Plumas County Planning Area

Watersheds and Waterways



FOSTER MORRISON CONSULTING

Flood

Plumas County Disaster Declarations 1950-2025 from Flood

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Flood (including heavy rain and storm)	22	1950, 1955, 1958 (twice), 1964, 1963, 1964, 1969, 1970 1980, 1986, 1993, 1992, 1995 (twice), 1996, 1997, 2006, 2017 (twice), 2023 (twice)	19	1950, 1955, 1958 (twice), 1963, 1964, 1969, 1970, 1986, 1992 (twice), 1995 (twice), 1997, 2006, 2017 (twice), 2023 (twice)

Plumas County NCDC Flooding Events 1/1/1996-7/31/2024

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
Flash Flood	3	0	0	0	0	$0	$0
Flood	12	0	0	1	0	$3,140,000	$0
Total	15	0	0	1	0	$3,140,000	$ 0

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Flood

Plumas County Planning Area

FEMA DFIRM Flood Zones

By Jurisdiction

Flood Zone	Description	Present in City of Portola	Present in Unincorporated County
A	1% annual chance flooding: No base flood elevations provided	X	X
AE	1% annual chance flooding: Base flood elevations provided	X	X
AE Regulatory Floodway	1% annual chance flood: Regulatory floodway; Base flood elevations provided	X	X
AH	1% annual chance flood areas of shallow flooding between one to three feet deep. Regulatory floodway; Base flood elevations provided		X
Shaded X	0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood	X	X
X (unshaded)	No flood hazard	X	X

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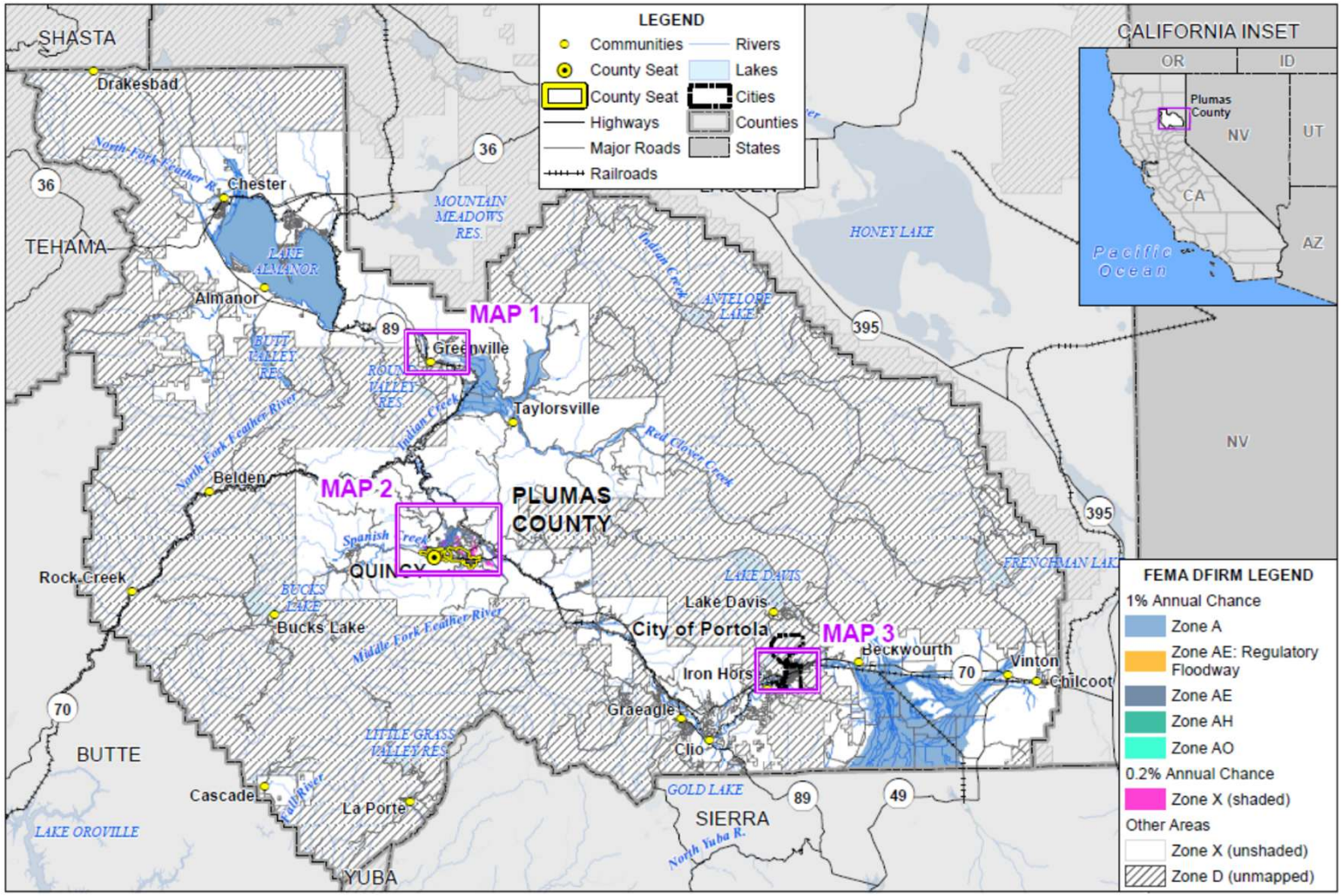
Flood

Plumas County Planning Area

FEMA DFIRMs (Map 0)



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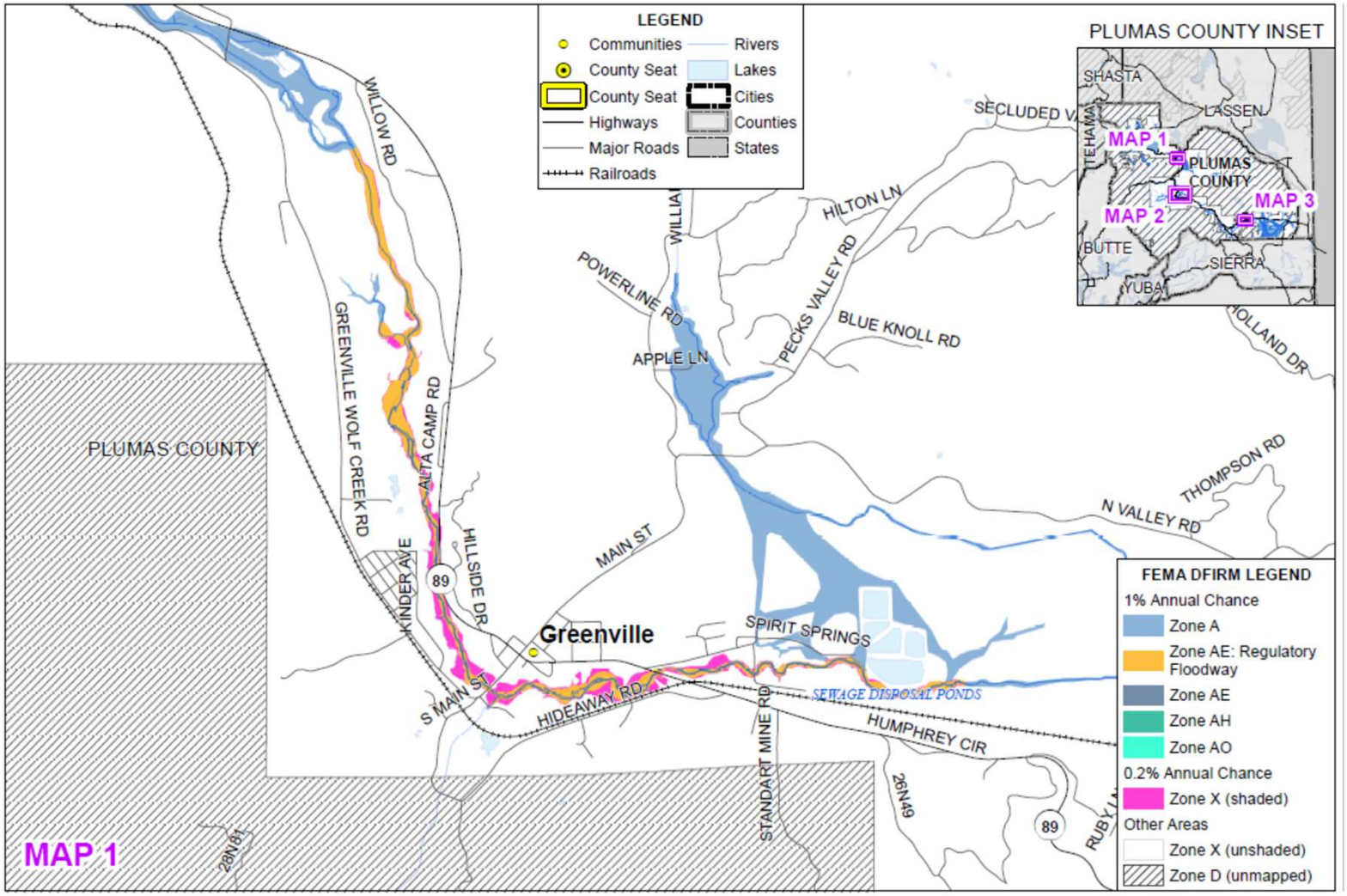
Flood

Plumas County Planning Area

FEMA DFIRMs (Map 1)

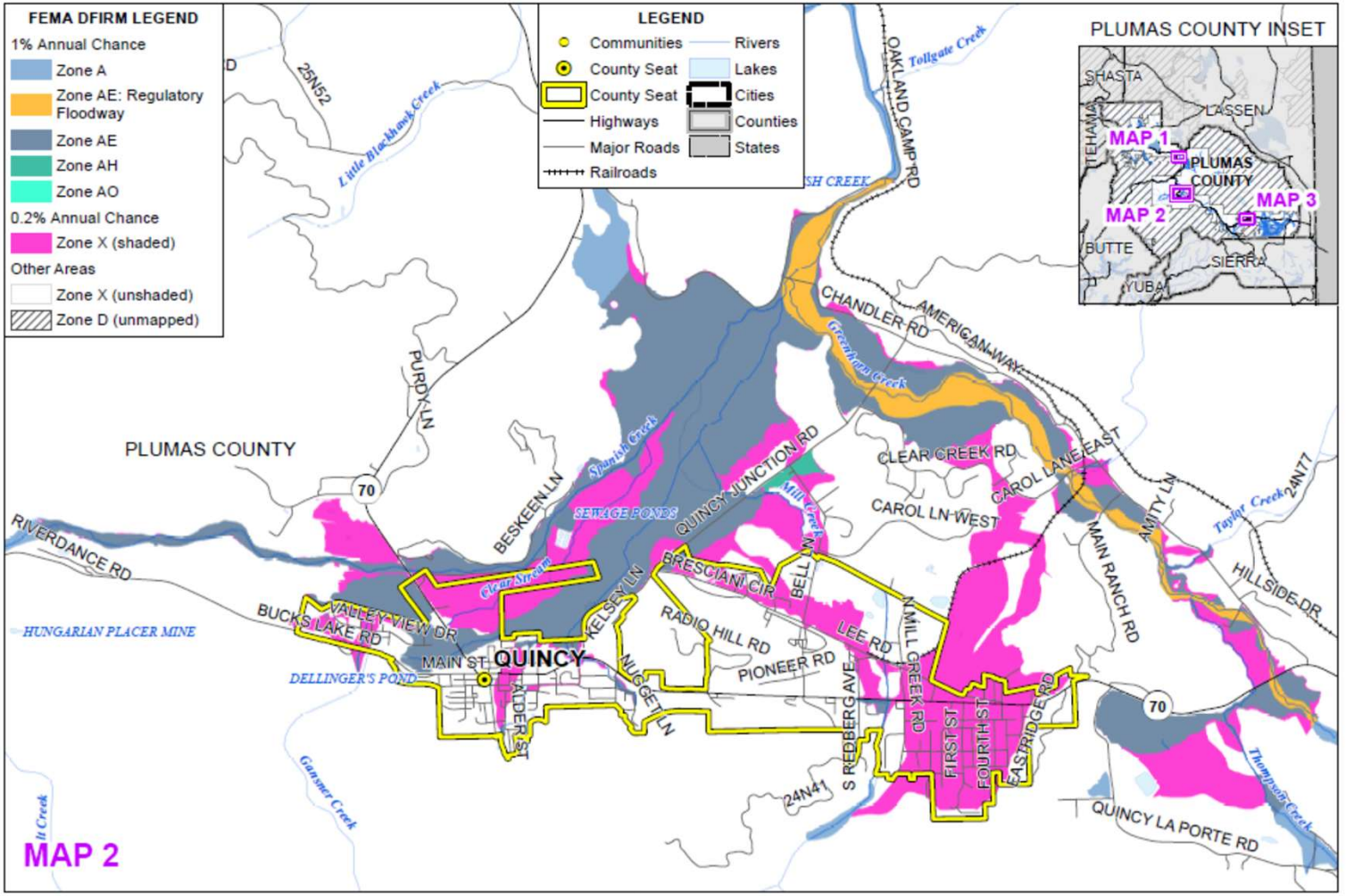


FOSTER MORRISON CONSULTING

Flood

Plumas County Planning Area

FEMA DFIRMs (Map 2)



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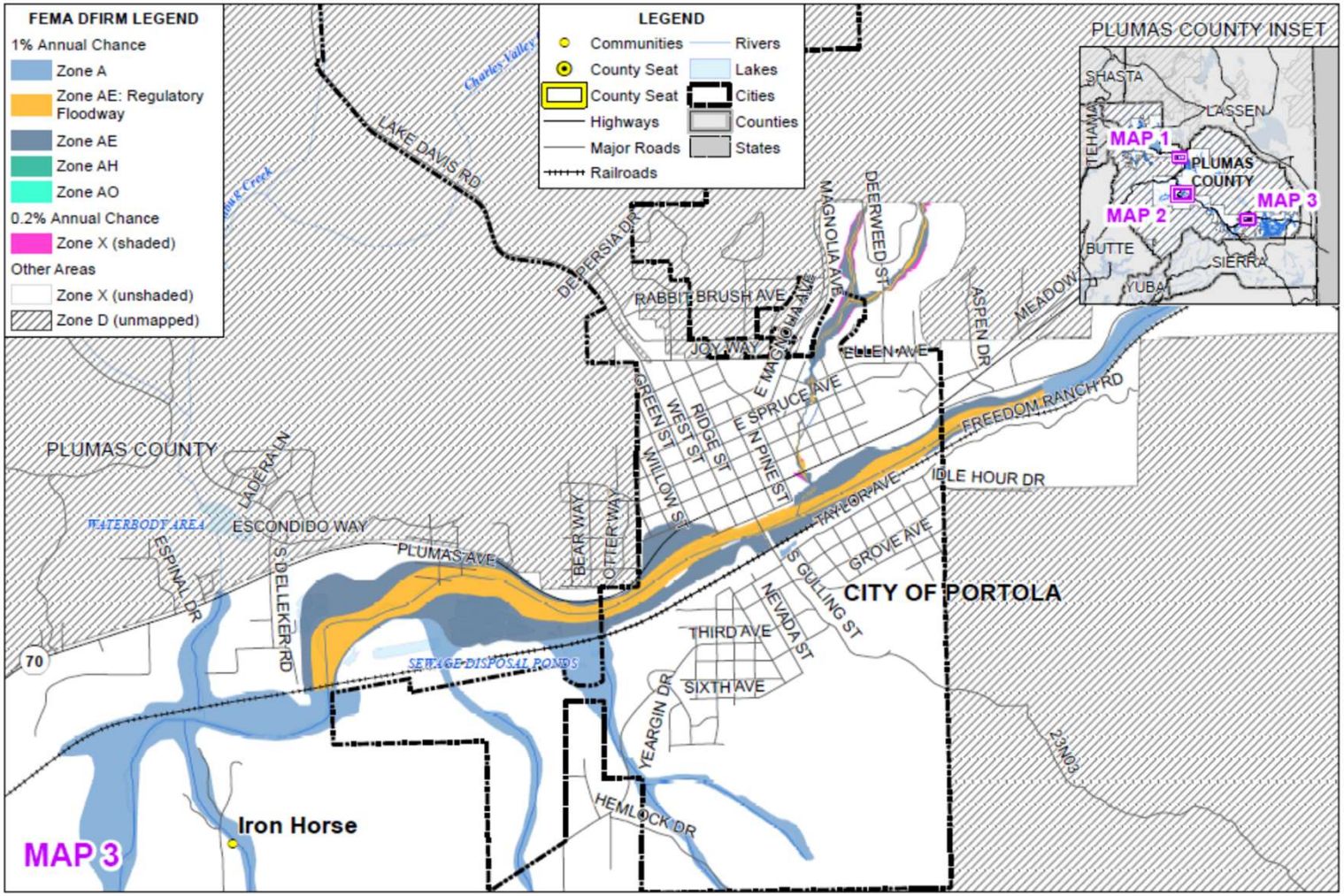
Flood

Plumas County Planning Area

FEMA DFIRMs (Map 3)

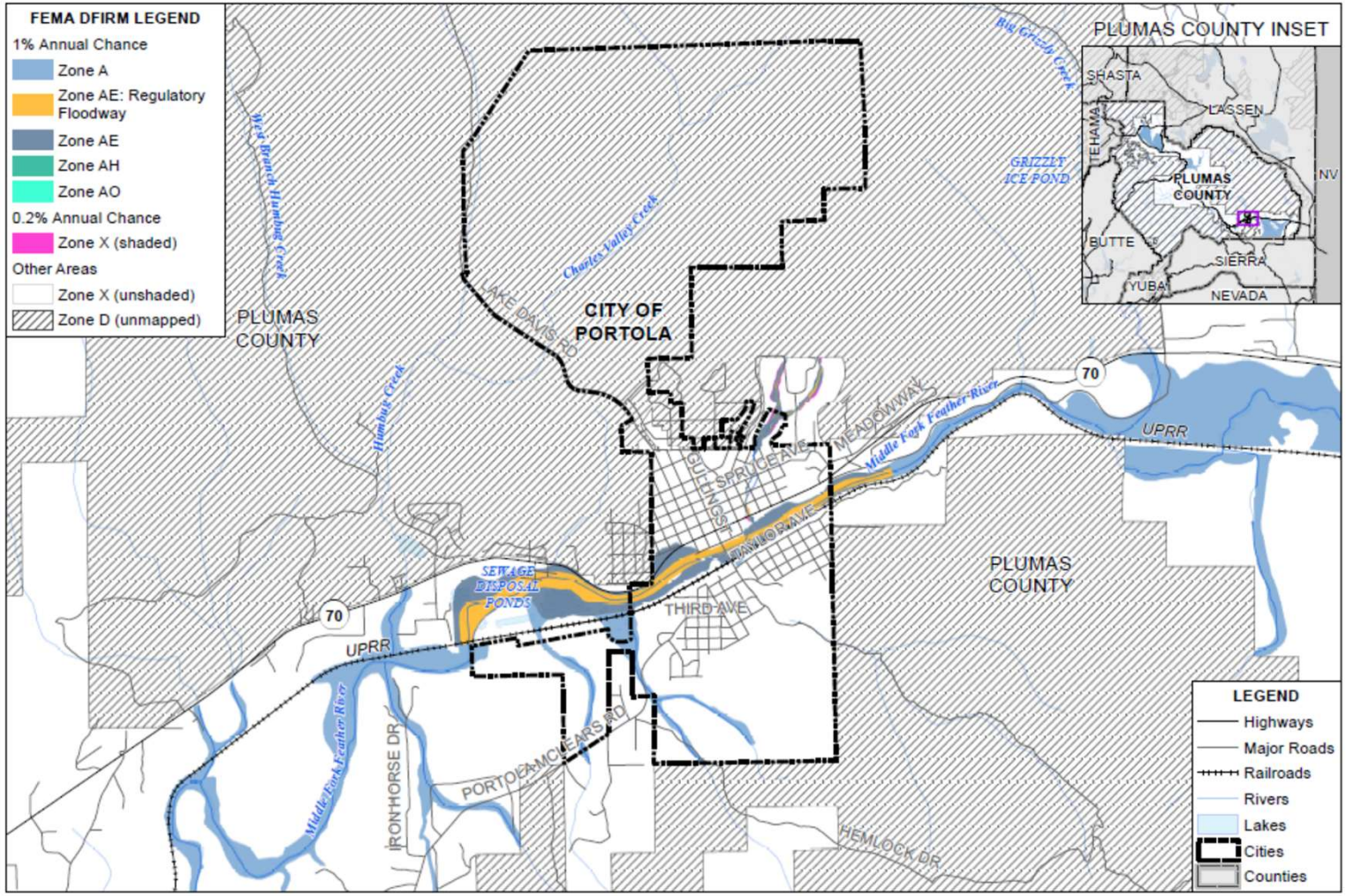


FOSTER MORRISON CONSULTING

Flood

FEMA DFIRMs

Portola



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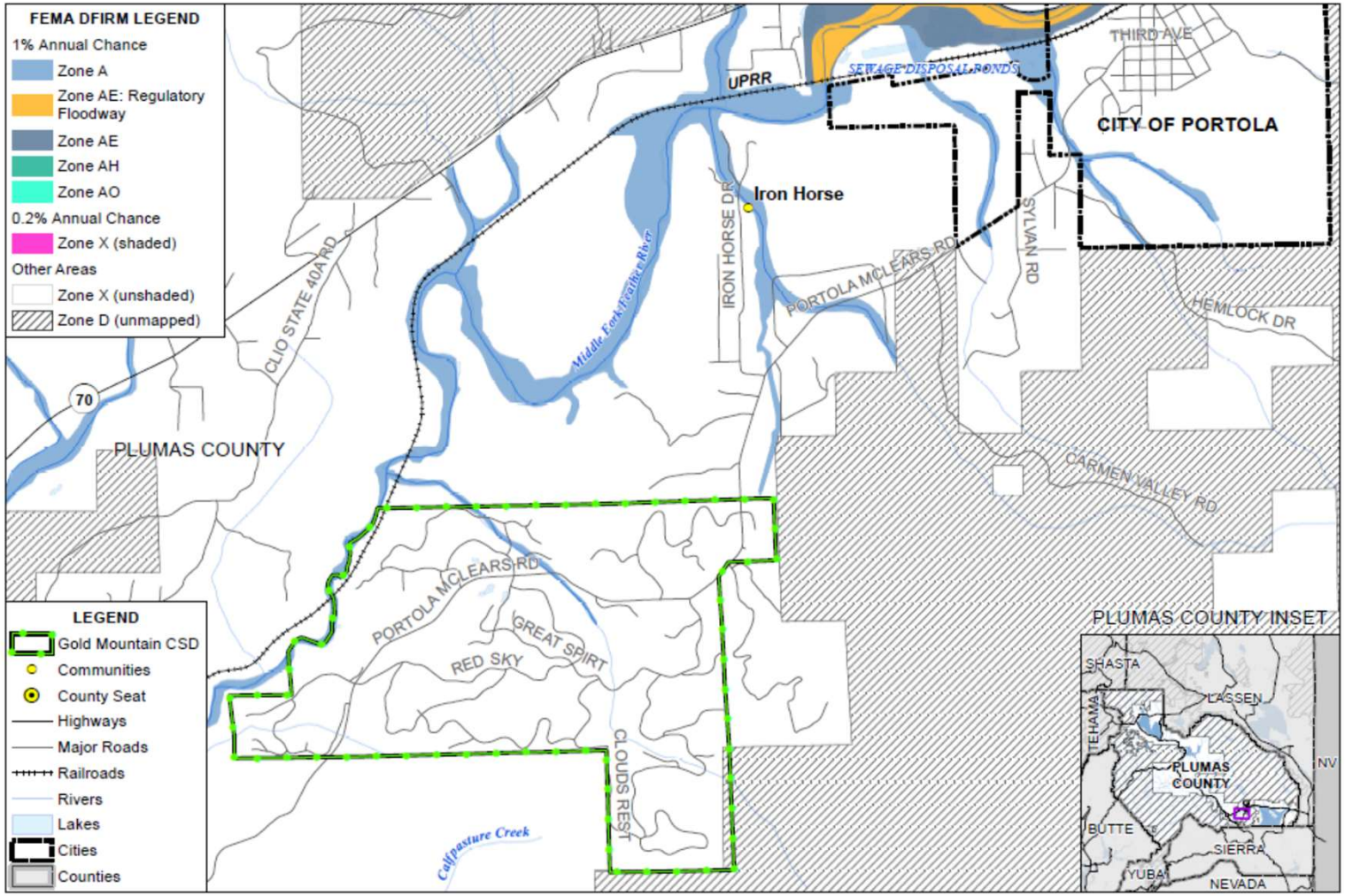
Flood

FEMA DFIRMs

Gold Mountain CSD



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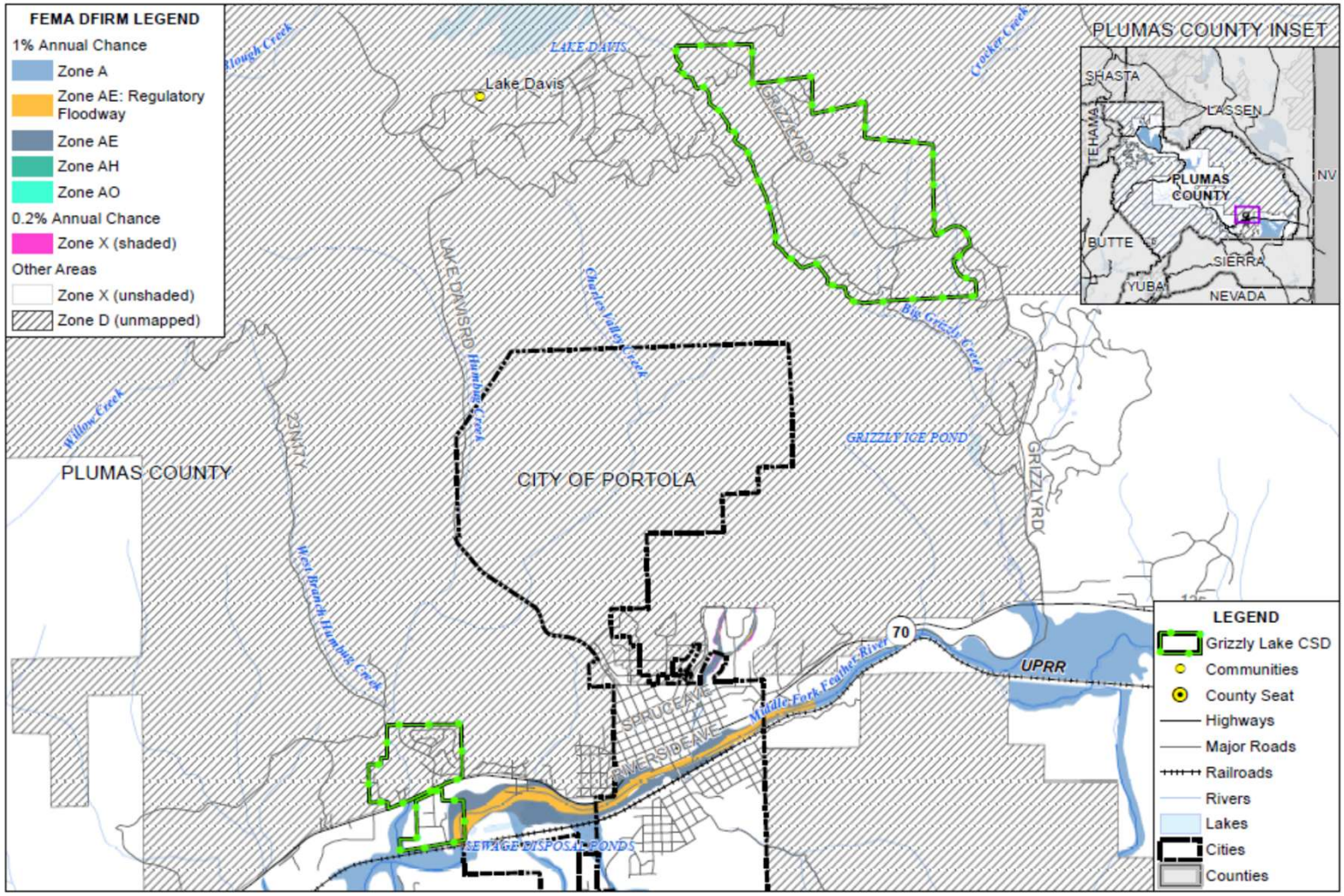
Flood

FEMA DFIRMs

Grizzly Lake CSD



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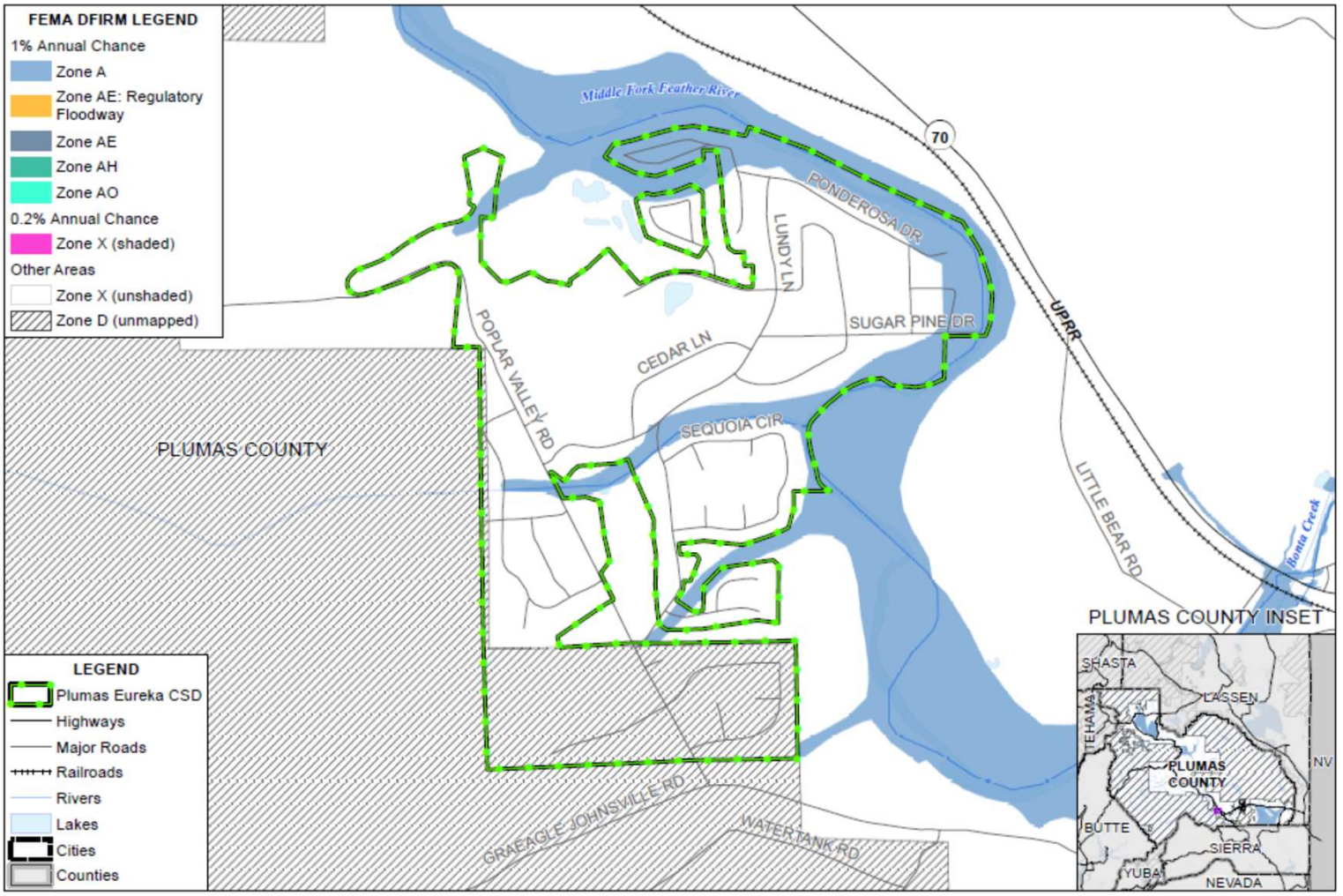
Flood

FEMA DFIRMs

Plumas Eureka CSD



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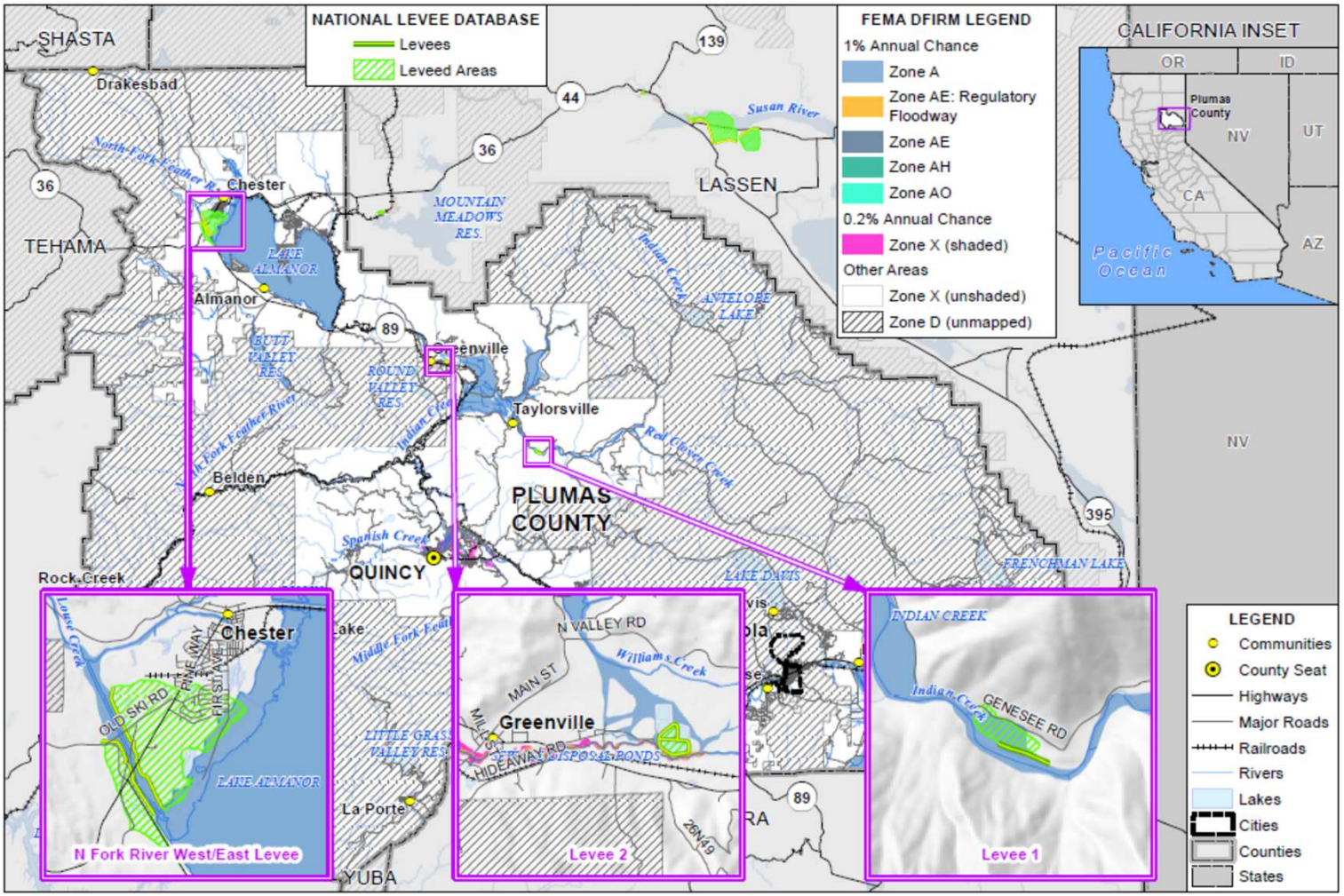
Flood

Plumas County Planning Area

DFIRM Levees



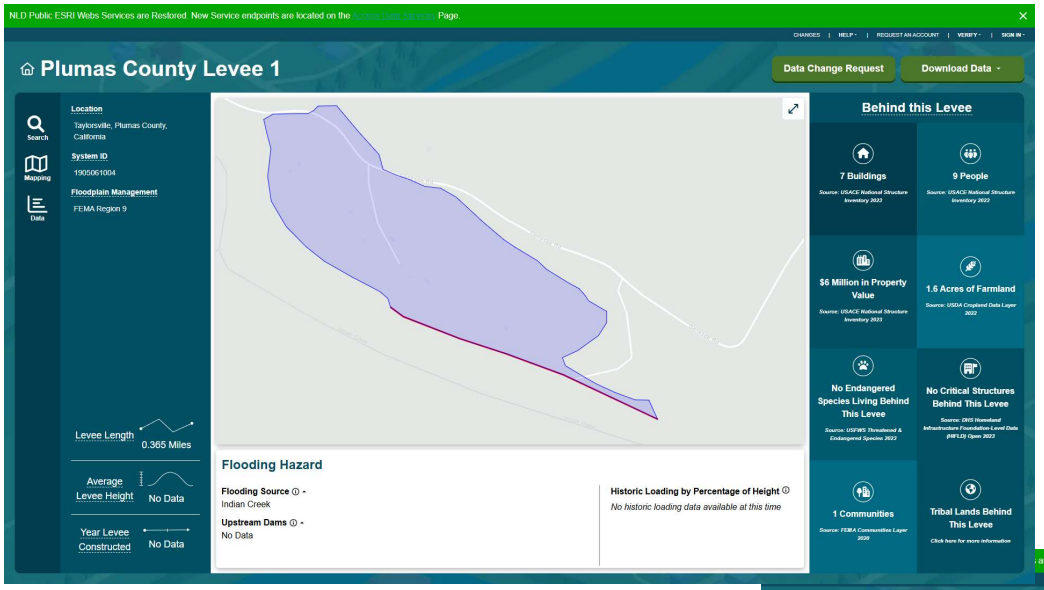
FOSTER MORRISON CONSULTING

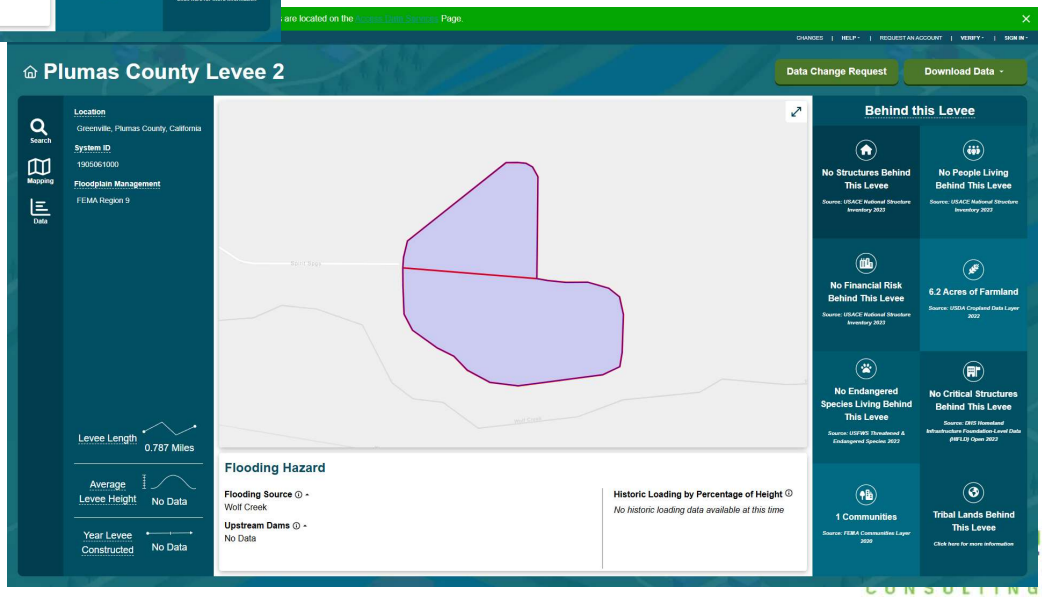
Flood

Plumas County Planning Area

National Levee Database

Plumas County Levees 1 and 2





Flood

Plumas County Planning Area

Geographic Extents

By FEMA DFIRMS

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance Flood Hazard	84,777	5.07%	23,047	24.78%	61,730	3.91%
0.2% Annual Chance Flood Hazard	1,432	0.09%	667	0.72%	765	0.05%
Other Areas	1,585,954	94.84%	69,299.2	74.50%	1,516,654	96.04%
Grand Total	1,672,162	100.00%	93,013	100.00%	1,579,150	100.00%

FOSTER MORRISON CONSULTING

Flood

Plumas County Planning Area

Parcels, Structures, and Values at Risk

1% and 0.2% annual chance Flood by Jurisdiction

Jurisdiction / Flood Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola							
1% Annual Chance Flood Hazard	136	50	$5,846,857	$23,227,628	$1,322,526	$20,717,340	$51,114,351
0.2% Annual Chance Flood Hazard	2	1	$137,332	$374,544	$0	$374,544	$886,420
Other Areas	1,505	970	$31,966,182	$127,648,862	$592,546	$73,550,325	$233,757,915
City of Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686
Unincorporated Plumas County							
1% Annual Chance Flood Hazard	3,035	1,714	$436,754,330	$533,266,332	$68,252,298	$300,503,098	$1,338,776,058
0.2% Annual Chance Flood Hazard	943	787	$42,128,297	$144,725,179	$34,596,689	$91,002,831	$312,452,996
Other Areas	20,256	10,926	$1,186,112,101	$2,524,953,767	$38,678,576	$1,342,652,693	$5,092,397,137
Unincorporated Plumas County Total	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191

FOSTER MORRISON CONSULTING

Flood

Portola

Parcels, Structures, and Values at Risk:

1% and 0.2% Annual Chance Flood

by Property Use

Flood Zone / Property Use	Total Parcel	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard							
Zone A							
Residential	10	1	$1,607,108	$266,607	$91,460	$133,304	$2,098,479
ROW/Utilities	2	0	$0	$0	$0	$0	$0
Zone A Total	12	1	$1,607,108	$266,607	$91,460	$133,304	$2,098,479
Zone AE							
Commercial	15	9	$1,175,806	$3,112,199	$11,385	$3,112,199	$7,411,589
Government	2	0	$0	$0	$0	$0	$0
Institutional	1	1	$6,510	$147,552	$0	$147,552	$301,614
Residential	37	20	$634,510	$1,939,439	$5,280	$969,720	$3,548,949
ROW/Utilities	1	0	$0	$0	$0	$0	$0
Zone AE Total	56	30	$1,816,826	$5,199,190	$16,665	$4,229,471	$11,262,152
Zone AE: Regulatory Floodway							
Commercial	8	4	$1,441,811	$14,947,300	$1,214,401	$14,947,300	$32,550,812
Government	7	0	$0	$0	$0	$0	$0
Institutional	1	0	$0	$0	$0	$0	$0
Miscellaneous	1	0	$0	$0	$0	$0	$0
Residential	41	15	$981,112	$2,814,531	$0	$1,407,266	$5,202,909
ROW/Utilities	10	0	$0	$0	$0	$0	$0
Zone AE: Regulatory Floodway Total	68	19	$2,422,923	$17,761,831	$1,214,401	$16,354,566	$37,753,721
1% Annual Chance Flood Hazard Total	136	50	$5,846,857	$23,227,628	$1,322,526	$20,717,340	$51,114,351
0.2% Annual Chance Flood Hazard							
Zone X (shaded)							
Commercial	2	1	$137,332	$374,544	$0	$374,544	$886,420
Zone X (shaded) Total	2	1	$137,332	$374,544	$0	$374,544	$886,420
0.2% Annual Chance Flood Hazard Total	2	1	$137,332	$374,544	$0	$374,544	$886,420

Flood

Plumas County Planning Area

Populations at Risk by 1% and 0.2% Flood by Jurisdiction

Jurisdiction	1% Annual Chance		0.2% Annual Chance	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
City of Portola	36	82	0	0
Unincorporated County	1,497	3,578	680	1,625

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Flood

Plumas County Planning Area

Flood Insurance Policies in FEMA 1% Annual Chance Floodplain By Jurisdiction

Jurisdiction	Improved Parcels in SFHA (1% Annual Chance) Floodplain*	Insurance Policies in the SFHA (1% Annual Chance) Floodplain	Percentage of 1% Annual Chance Floodplain Parcels Currently Insured
City of Portola	36	2	11.1%
Unincorporated Plumas County	1,505	93	6.2%

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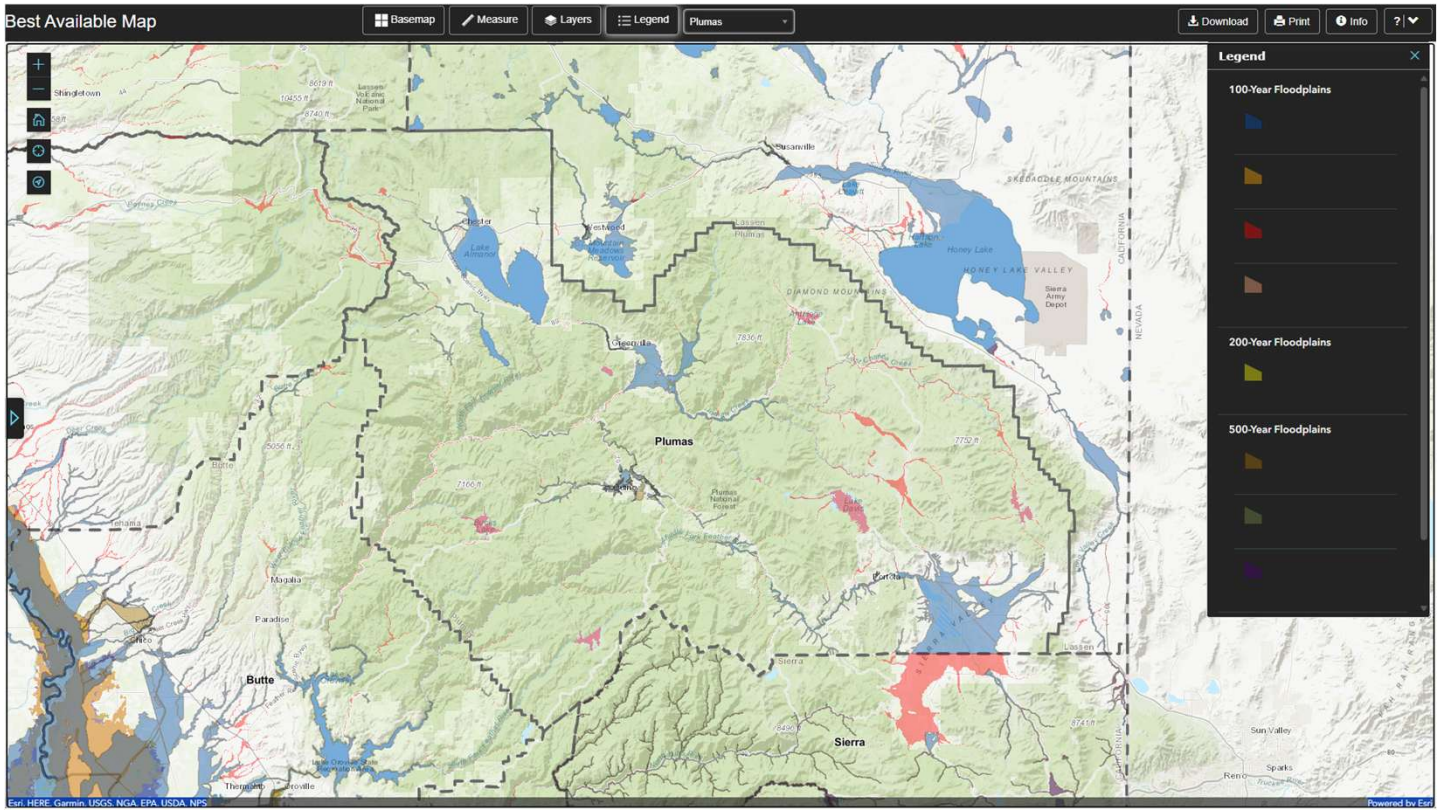
Flood

Plumas County Planning Area

DWR BAM (Best Available Map – Flood Awareness)



Source: California DWR. Retrieved 3/5/2025

Legend explanation: Blue - FEMA 100-Year, Orange – Local 100-Year (developed from local agencies), Red – DWR 100-year (Awareness floodplains identify the 100-year flood hazard areas using approximate assessment procedures.), Pink – USACE 100-Year (2002 Sac and San Joaquin River Basins Comp Study), Yellow – USACE 200-Year (2002 Sac and San Joaquin River Basins Comp Study), Tan – FEMA 500-Year, Grey – Local 500-Year (developed from local agencies), Purple – USACE 500-Year (2002 Sac and San Joaquin River Basins Comp Study).

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Hazardous Materials Transportation Release

In Plumas County there are multiple hazardous materials transportation routes:

- State Highways: 36, 49, 70, 89, and 147
- Railroads: Union Pacific, BNSF, Quincy Railroad, and Almanor

Plumas County Planning Area

Past Occurrences:

No FEMA State or Federal Disaster Declarations for Hazardous Material Transportation Release in Plumas County.

No NCDC Events for Hazardous Material Transportation Release.

USDOT Pipeline and Hazardous Materials Safety Administration's (PHMSA) Office of Hazardous Materials Safety Events: 11 separate events were included in the database. Most were minor, with 2 larger events of fuel spills.

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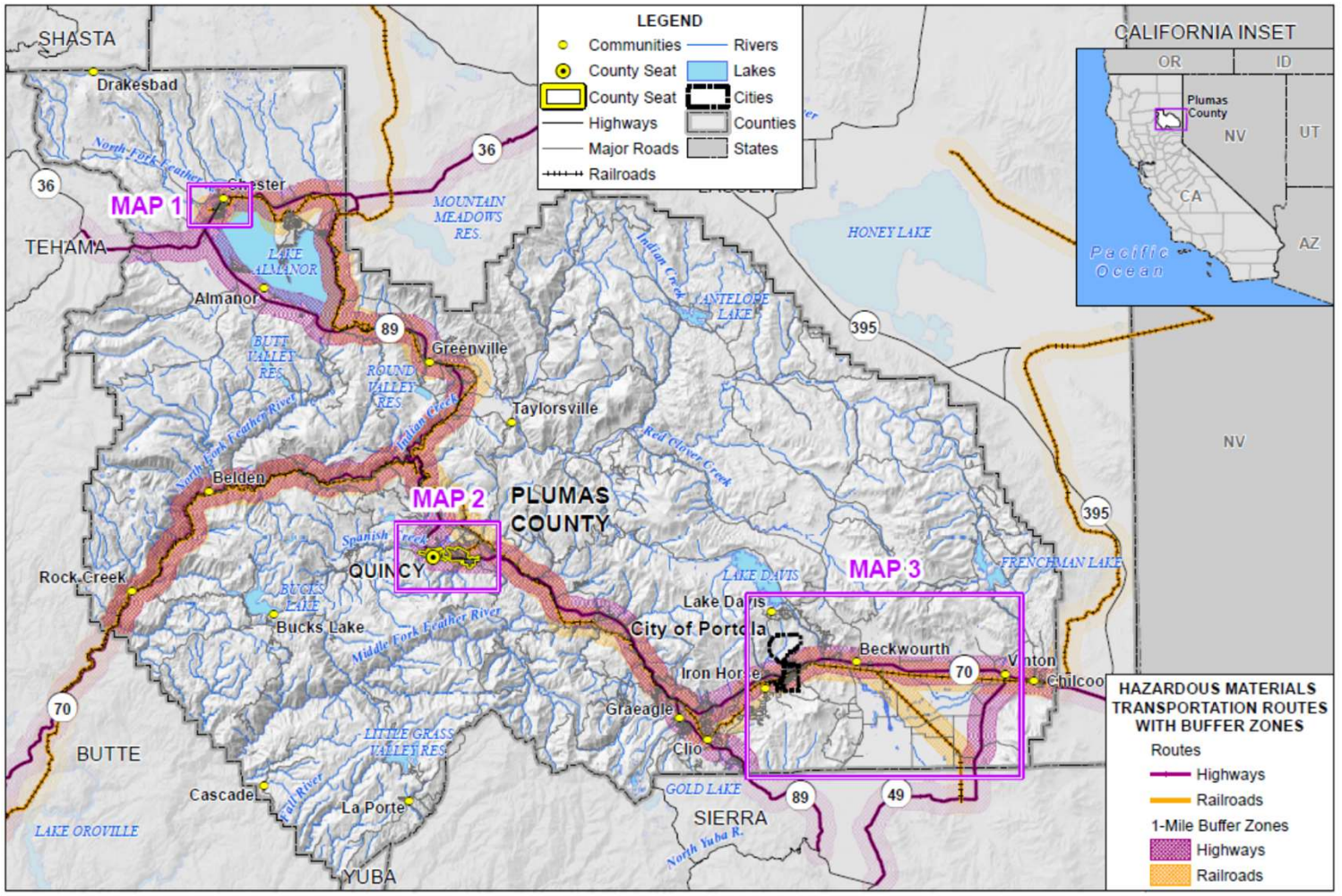
Hazardous Materials Transportation Release

Plumas County Planning Area

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

(Map 0)



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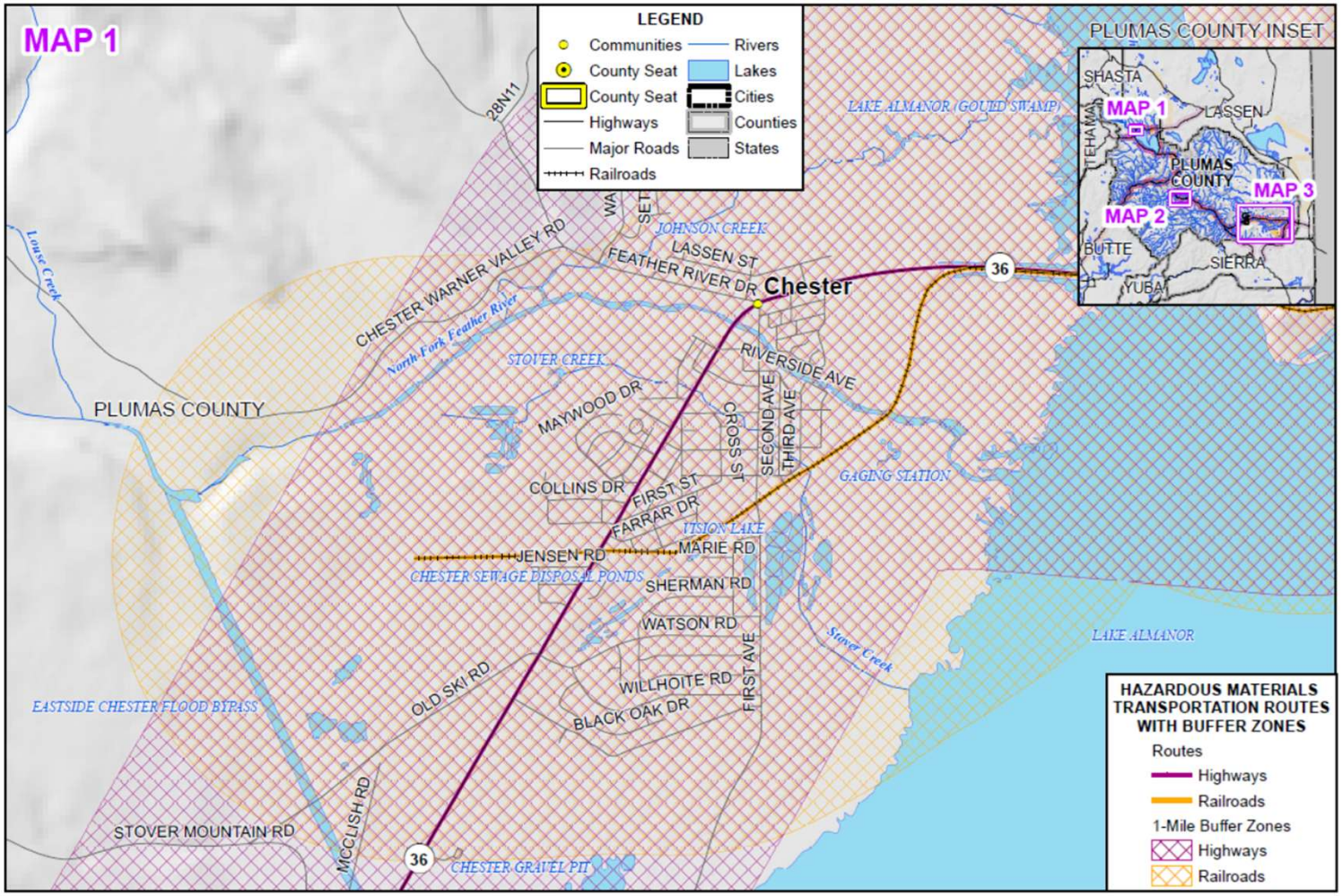
Hazardous Materials Transportation Release

Plumas County Planning Area

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

(Map 1)



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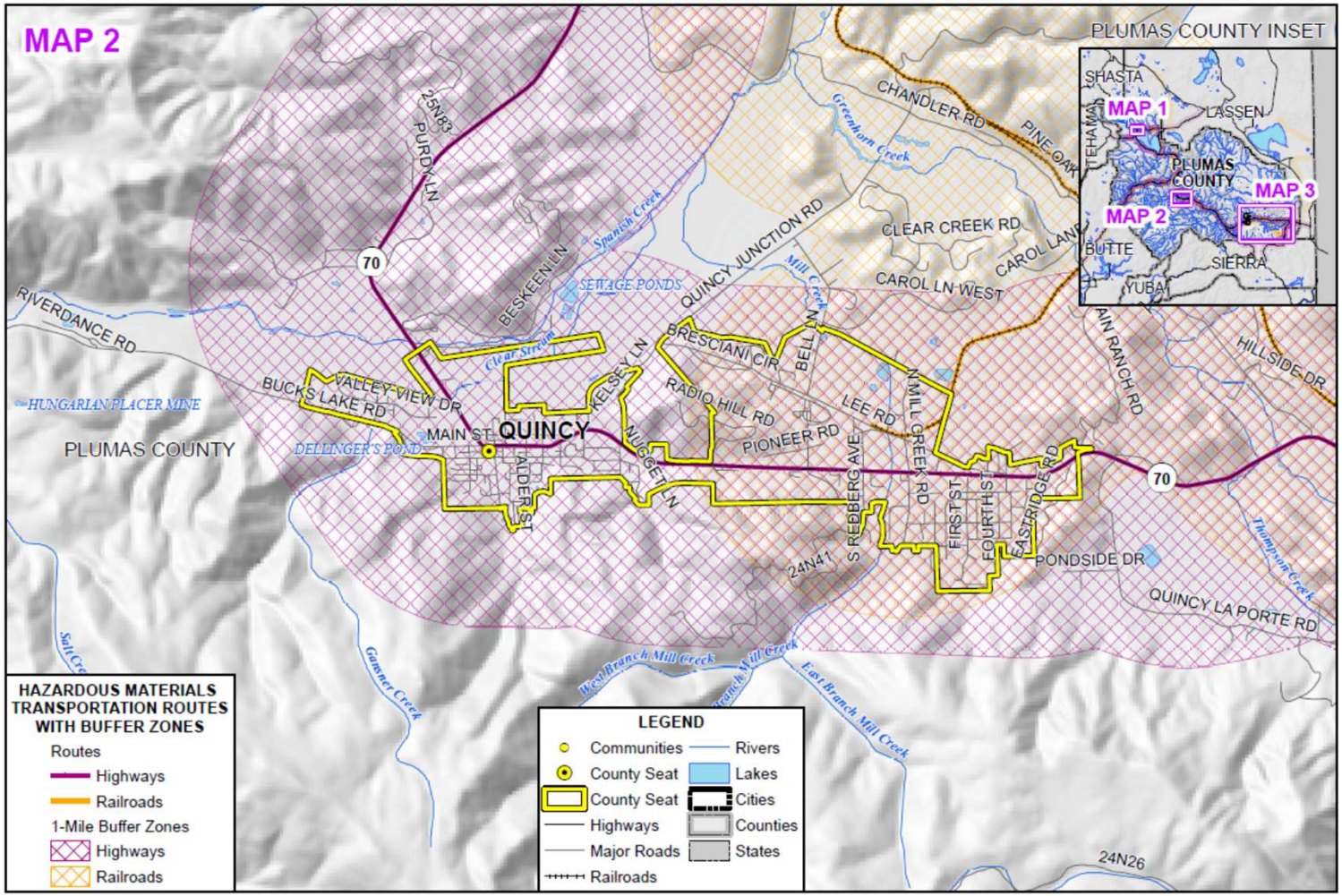
Hazardous Materials Transportation Release

Plumas County Planning Area

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

(Map 2)



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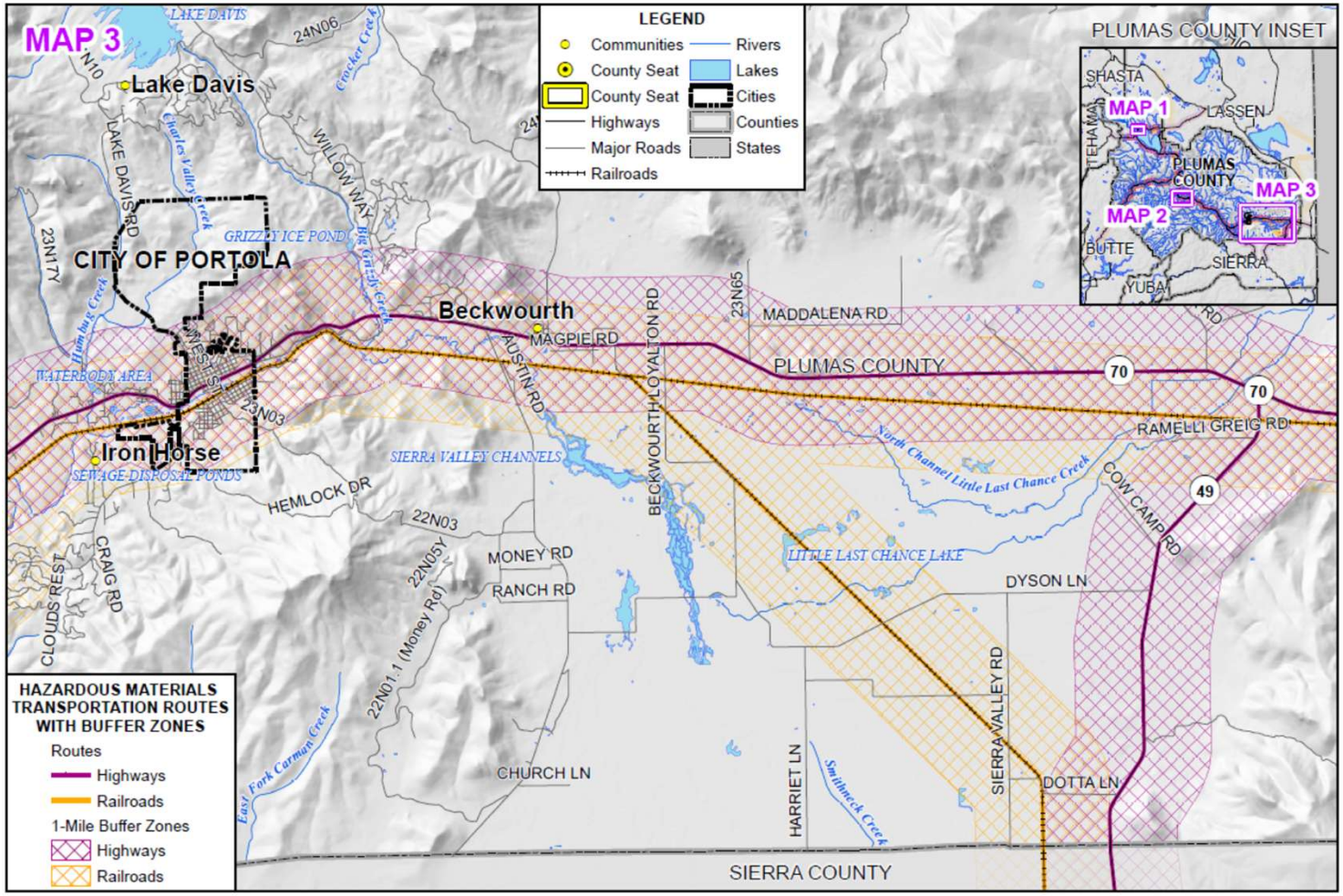
Hazardous Materials Transportation Release

Plumas County Planning Area

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

(Map 3)



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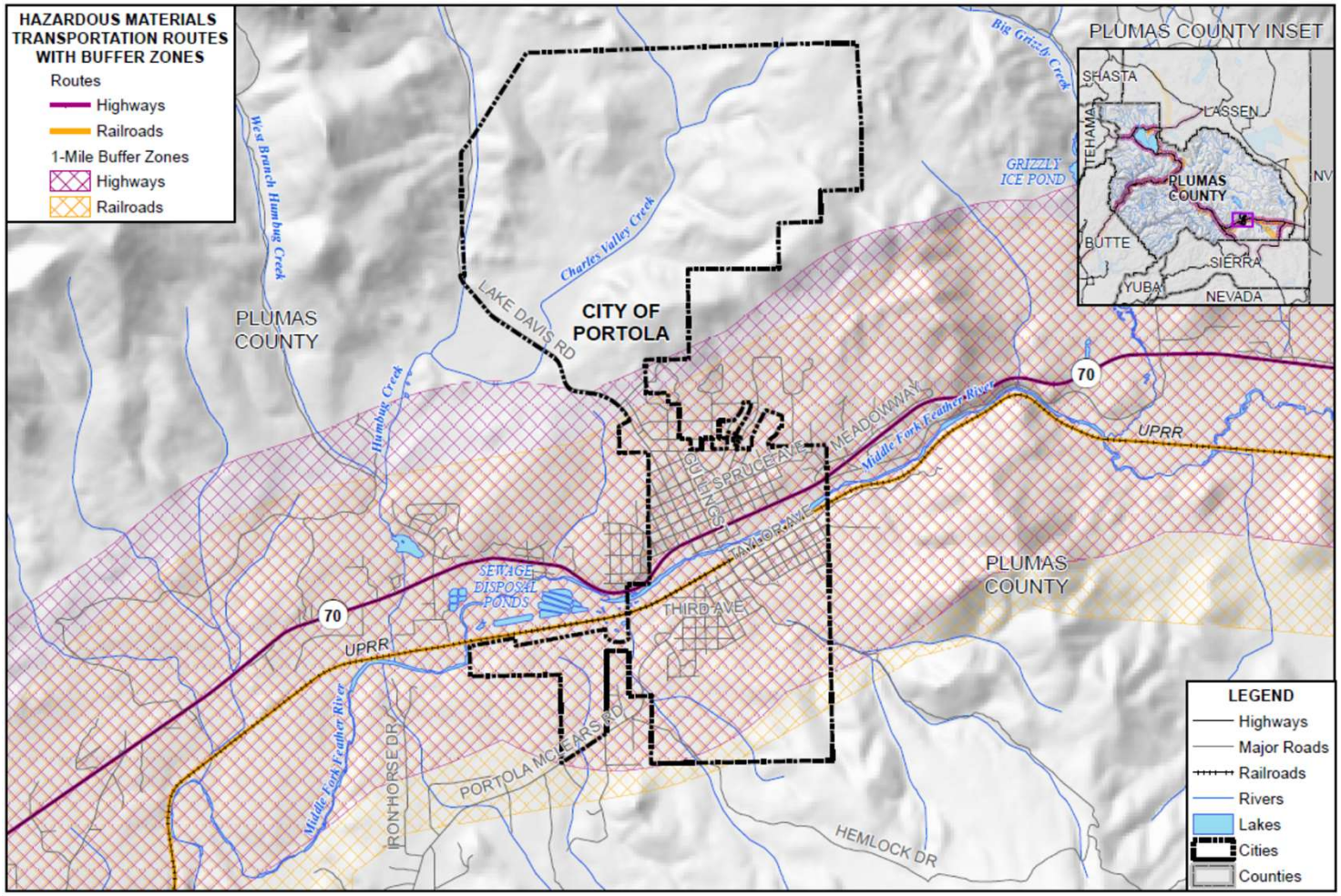
Hazardous Materials Transportation Release

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

Portola



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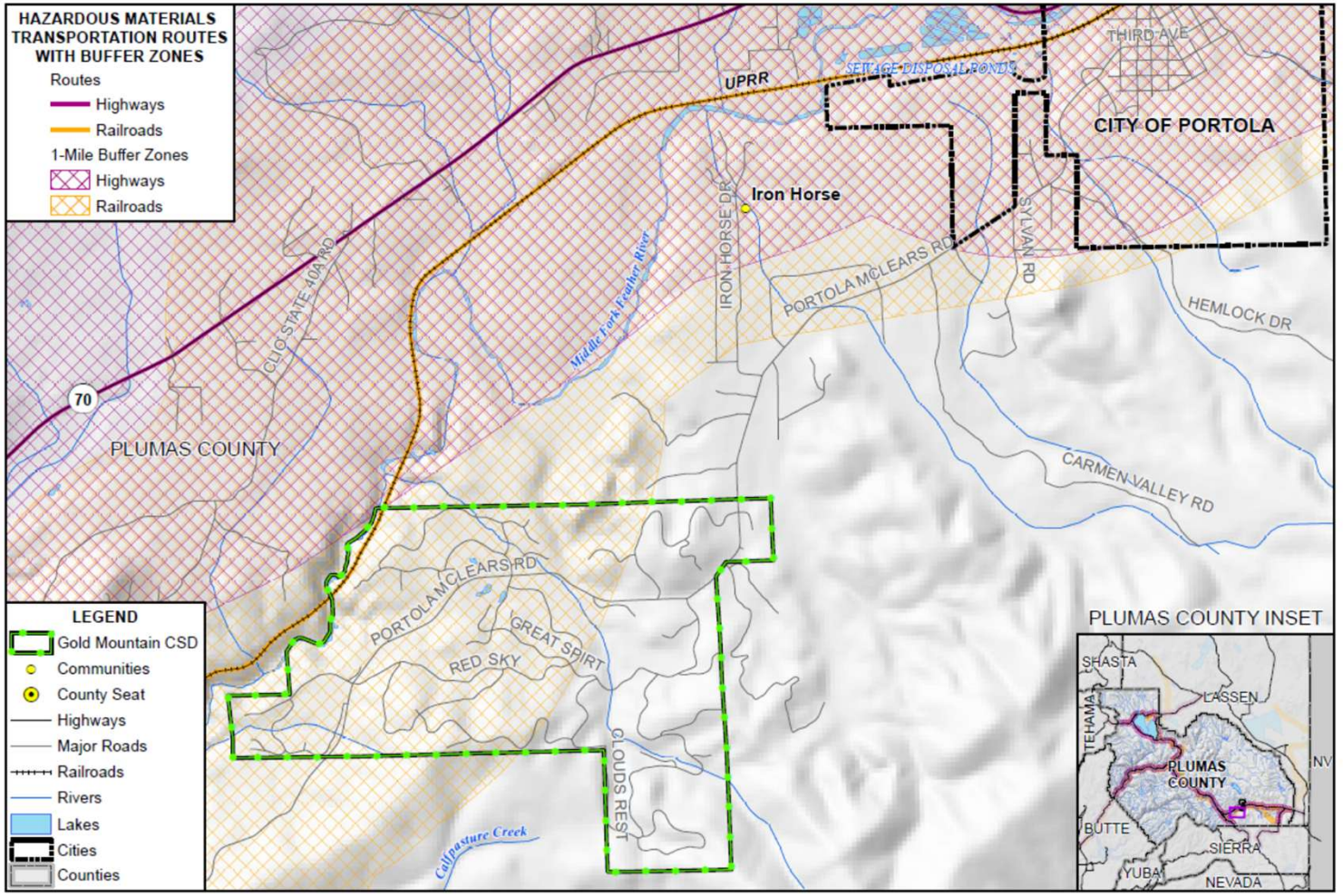
Hazardous Materials Transportation Release

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

Gold Mountain CSD



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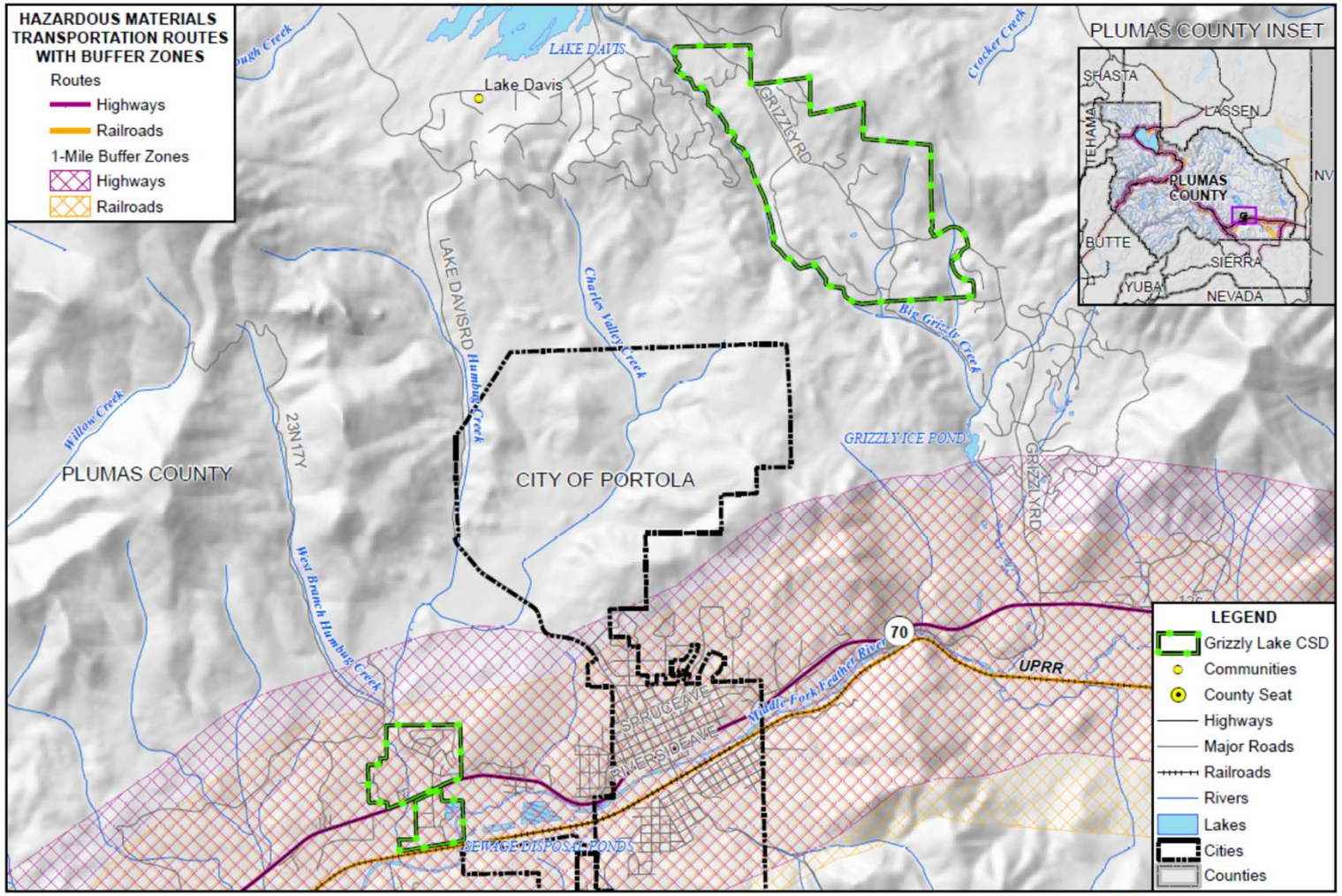
Hazardous Materials Transportation Release

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

Grizzly Lake CSD



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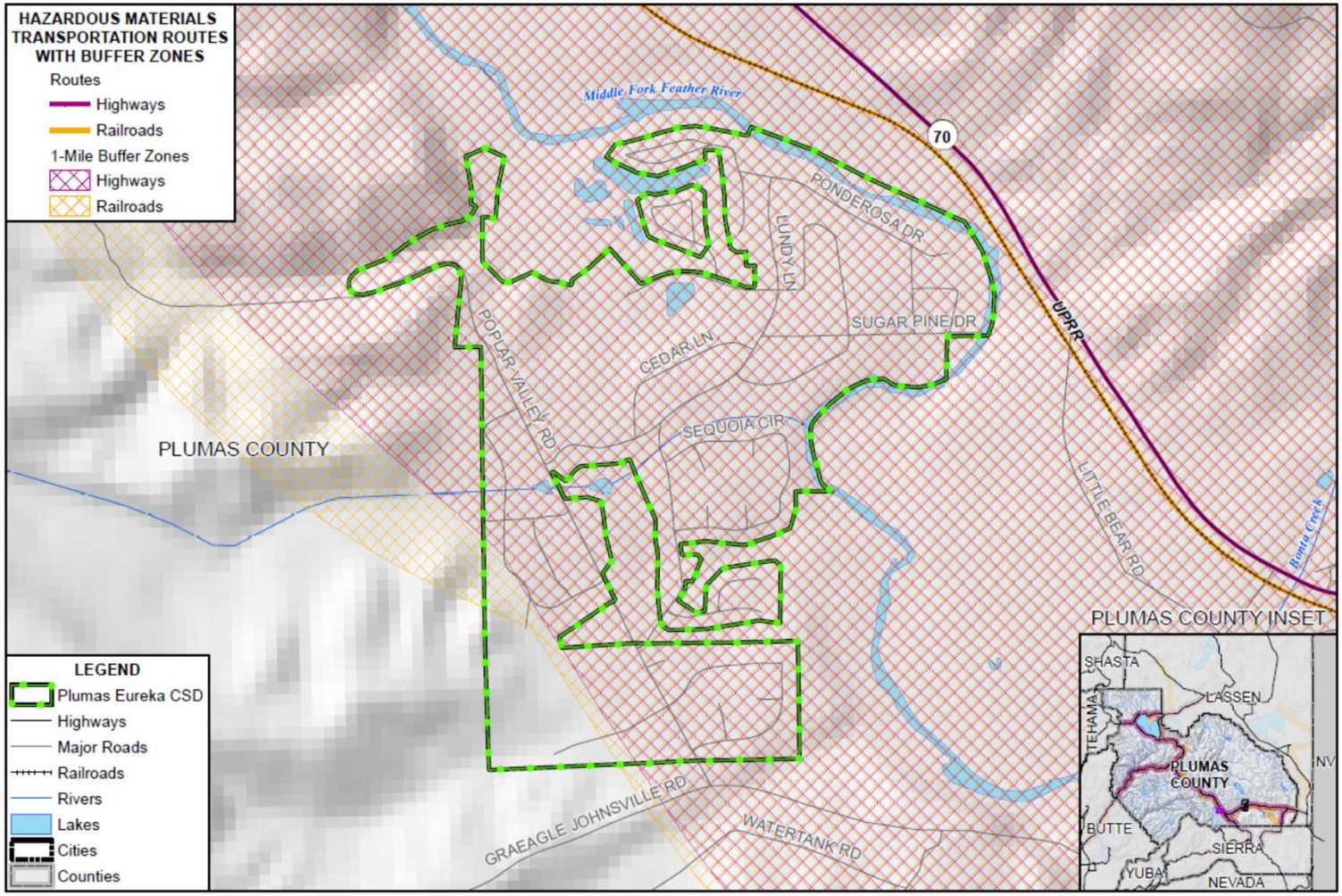
Hazardous Materials Transportation Release

Hazardous Materials Transportation Routes w/ buffer (Highways/ Railroads)

Plumas Eureka CSD



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Hazardous Materials Transportation Release

Plumas County Planning Area

Geographic Extents

By Hazardous Materials Route Buffers: Highways & Railroads

Plumas County Highway Routes

Hazardous Materials Routes	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Highway 147	1,451	0.09%	577	1%	874	0.06%
Highway 36	1,725	0.10%	644	1%	1,081	0.07%
Highway 49	628	0.04%	98	0.11%	530	0.03%
Highway 70	28,531	2%	13,095	14%	15,436	1%
Highway 89	25,218	2%	10,845	12%	14,374	1%

Plumas County Railroad Routes

Hazardous Materials Routes	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Almanor Railroad	2,496	0.1%	665	1%	1,830	0.1%
BNSF	7,441	0.4%	3,090	3%	4,351	0.3%
Quincy Railroad	2,540	0.2%	1,596	2%	944	0.1%
UP	1,286	0.1%	285	0.3%	1,000	0.1%
UP / BNSF	25,850	2%	11,197	12%	14,653	1%

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Hazardous Materials Transportation Release

Plumas County Planning Area

Parcels, Structures, and Values at Risk

Inside/Outside of Highway/Railroad Routes

by Jurisdiction

Jurisdiction/ Hazardous Materials Routes	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola							
Inside Haz Mat Route	1,642	1,021	$37,943,783	$151,251,034	$1,915,072	$94,642,209	$285,752,098
Outside Haz Mat Route	1	0	$6,588	$0	$0	$0	$6,588
City of Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686
Unincorporated Plumas County							
Inside Haz Mat Route	15,184	8,959	$967,812,315	$2,094,280,457	$132,339,250	$1,160,806,984	$4,355,239,006
Outside Haz Mat Route	9,050	4,468	$697,182,413	$1,108,664,821	$9,188,313	$573,351,638	$2,388,387,185
Unincorporated Plumas County Total	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191
Grand Total	25,877	14,448	$1,702,945,099	$3,354,196,312	$143,442,635	$1,828,800,830	$7,029,384,876

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Hazardous Materials Transportation Release

Plumas County Planning Area

Populations at Risk

by route by Jurisdiction

Portola – Residential Populations in Hazardous Materials Highway Buffer Zones by Route

Highway Route	Improved Residential Parcels	Population at Risk
Highway 70	906	2,075

Unincorporated Plumas County – Residential Populations in Hazardous Materials Highway Buffer Zones by Route

Highway Route	Improved Residential Parcels	Population at Risk
Highway 147	618	1,477
Highway 36	1,110	2,653
Highway 36 and Highway 89	1	2
Highway 49	1	2
Highway 49 and Highway 70	19	45
Highway 70	1,126	2,691
Highway 70 and Highway 89	2,817	6,732
Highway 89	2,015	4,816
Highway 89 and Highway 147	4	10

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Hazardous Materials Transportation Release

Plumas County Planning Area

Populations at Risk

by route by Jurisdiction

Portola – Residential Populations in Hazardous Materials Railroad Buffer Zones by Route

Railroad Route	Improved Residential Parcels	Population at Risk
UP / BNSF	899	2,058

Unincorporated Plumas County – Residential Populations in Hazardous Materials Railroad Buffer Zones by Route

Railroad Route	Improved Residential Parcels	Population at Risk
Almanor Railroad	1,188	2,839
Almanor Railroad and BNSF	0	0
BNSF	1,010	2,414
BNSF and UP / BNSF	30	69
Quincy Railroad	822	1,965
Quincy Railroad and UP / BNSF	223	533
UP	0	0
UP / BNSF	2,813	6,723
UP and UP / BNSF	6	14

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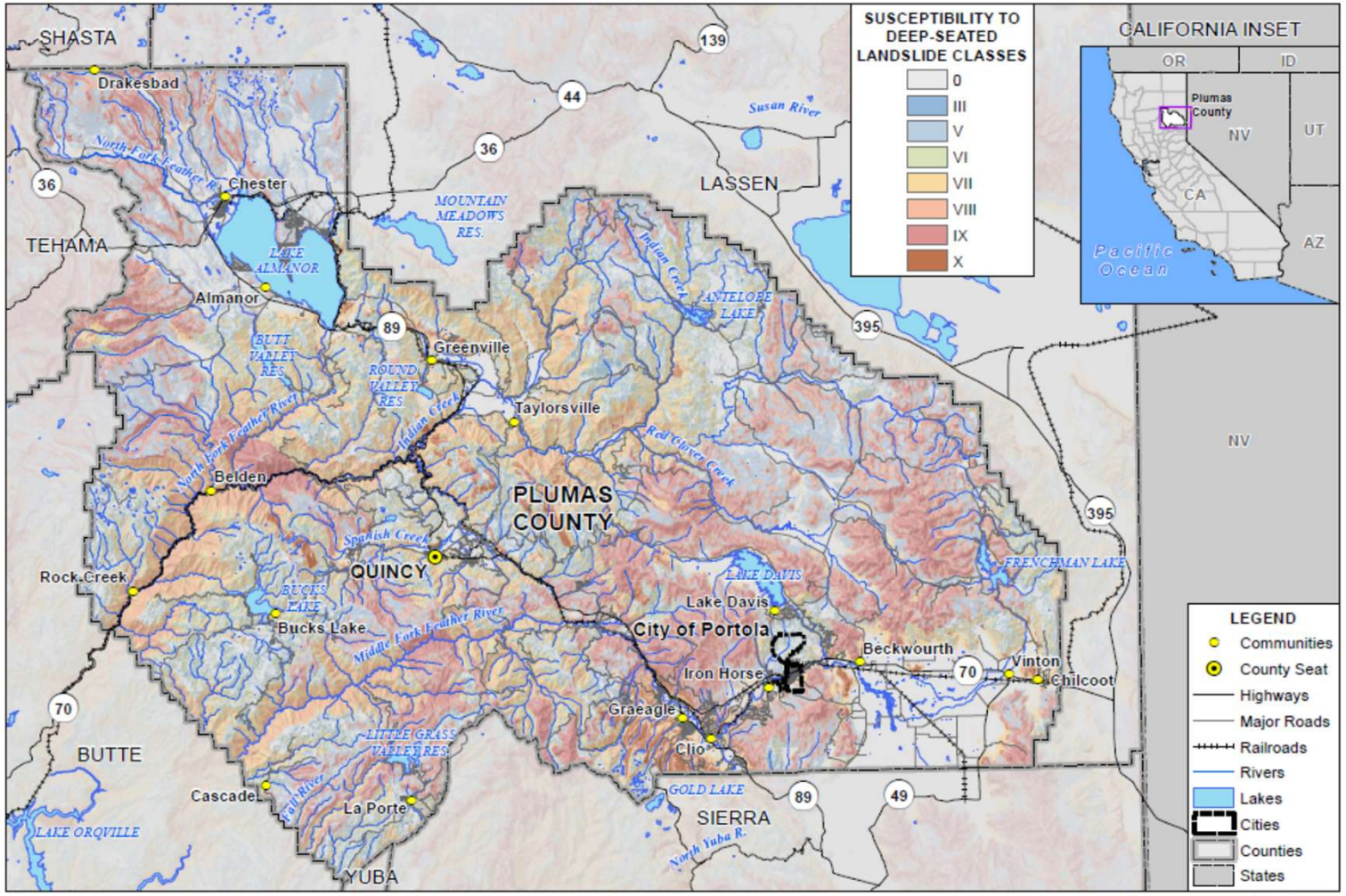
Landslide, Mudslide,& Debris Flow

Plumas County Planning Area

Very High: (Class X)
High: (Classes VII, VIII, & IX)



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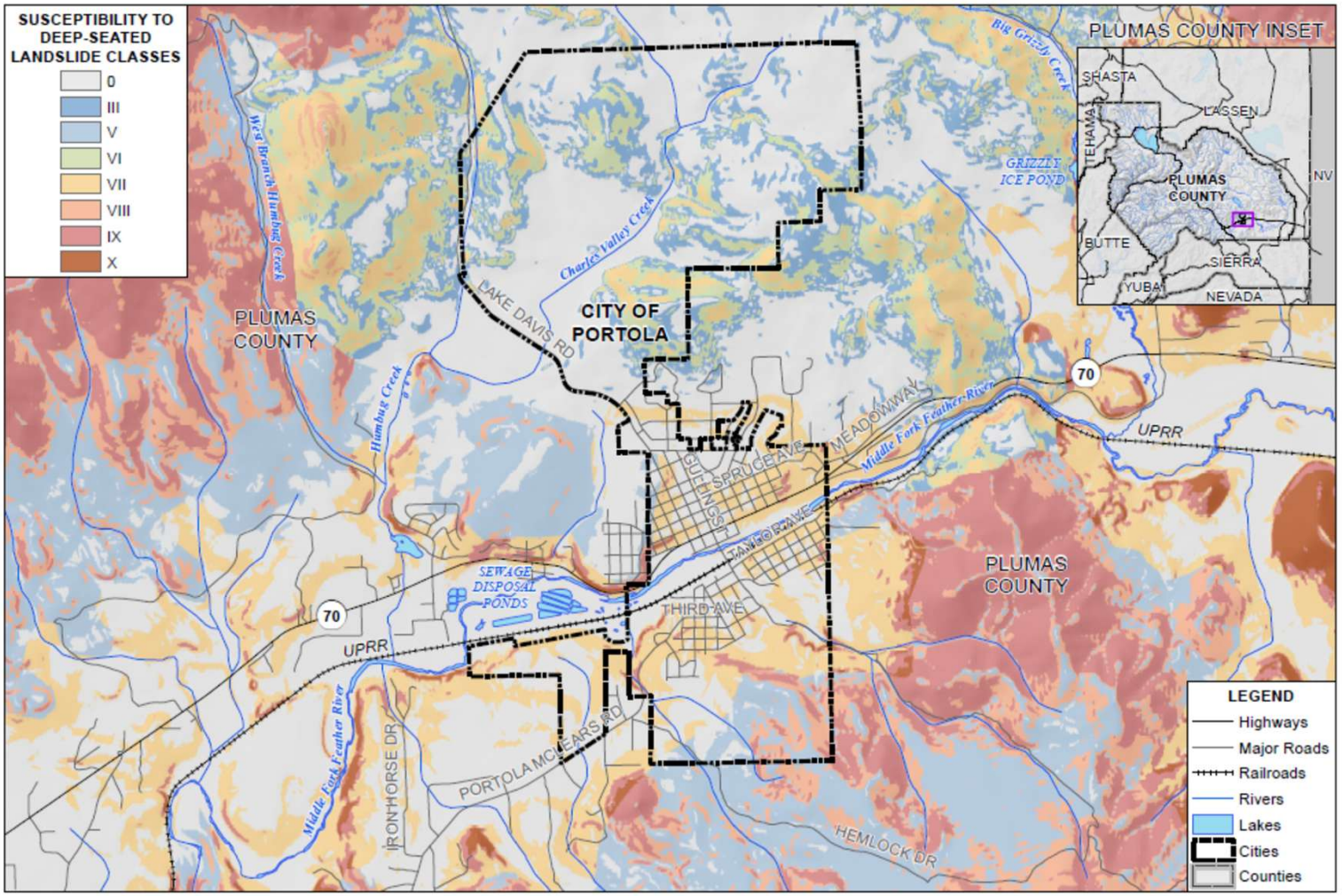
Landslide, Mudslide, & Debris Flow

Portola

Very High: (Class X)
High: (Classes VII, VIII, & IX)



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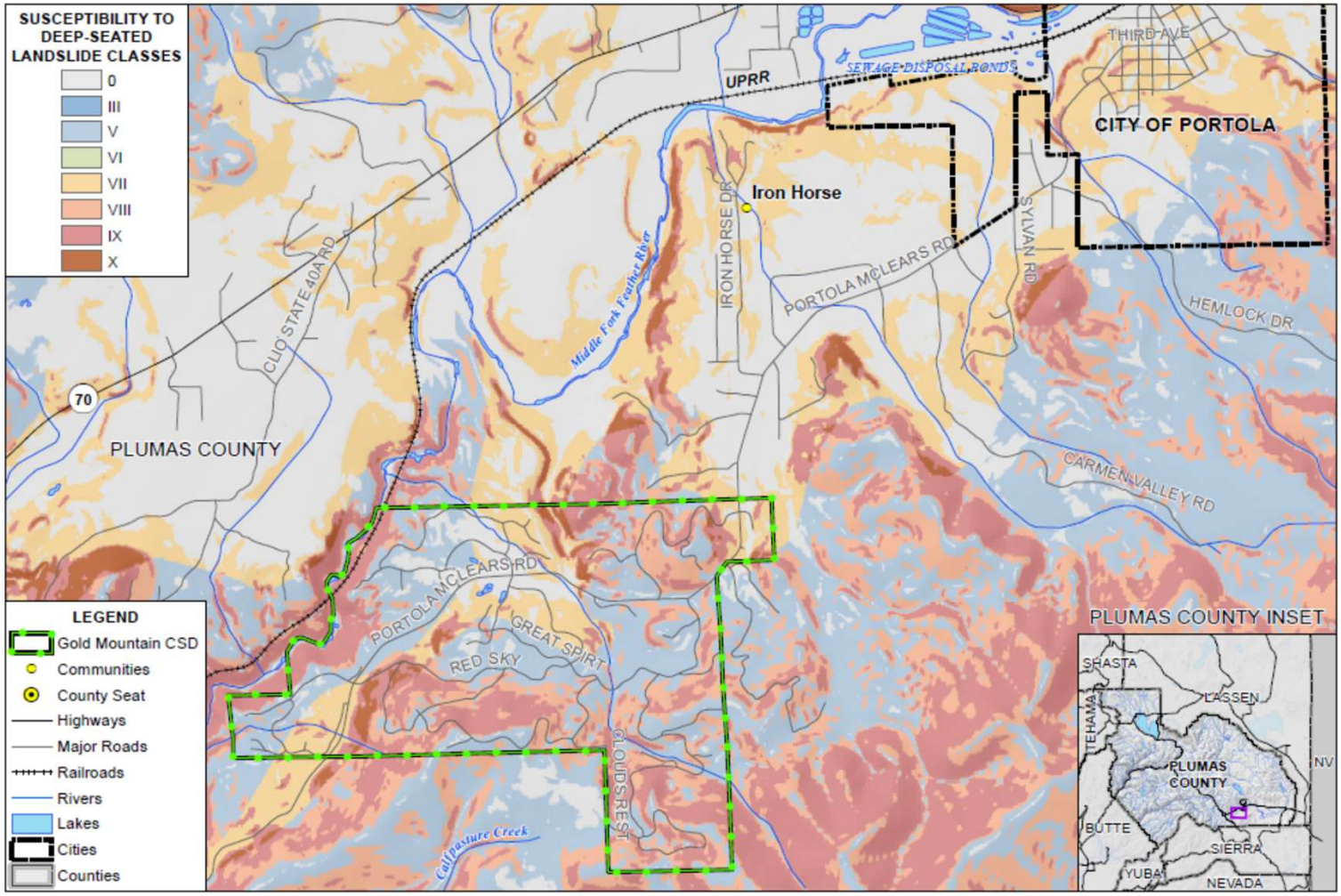
Landslide, Mudslide, & Debris Flow

Gold Mountain CSD

Very High: (Class X)
High: (Classes VII, VIII, & IX)



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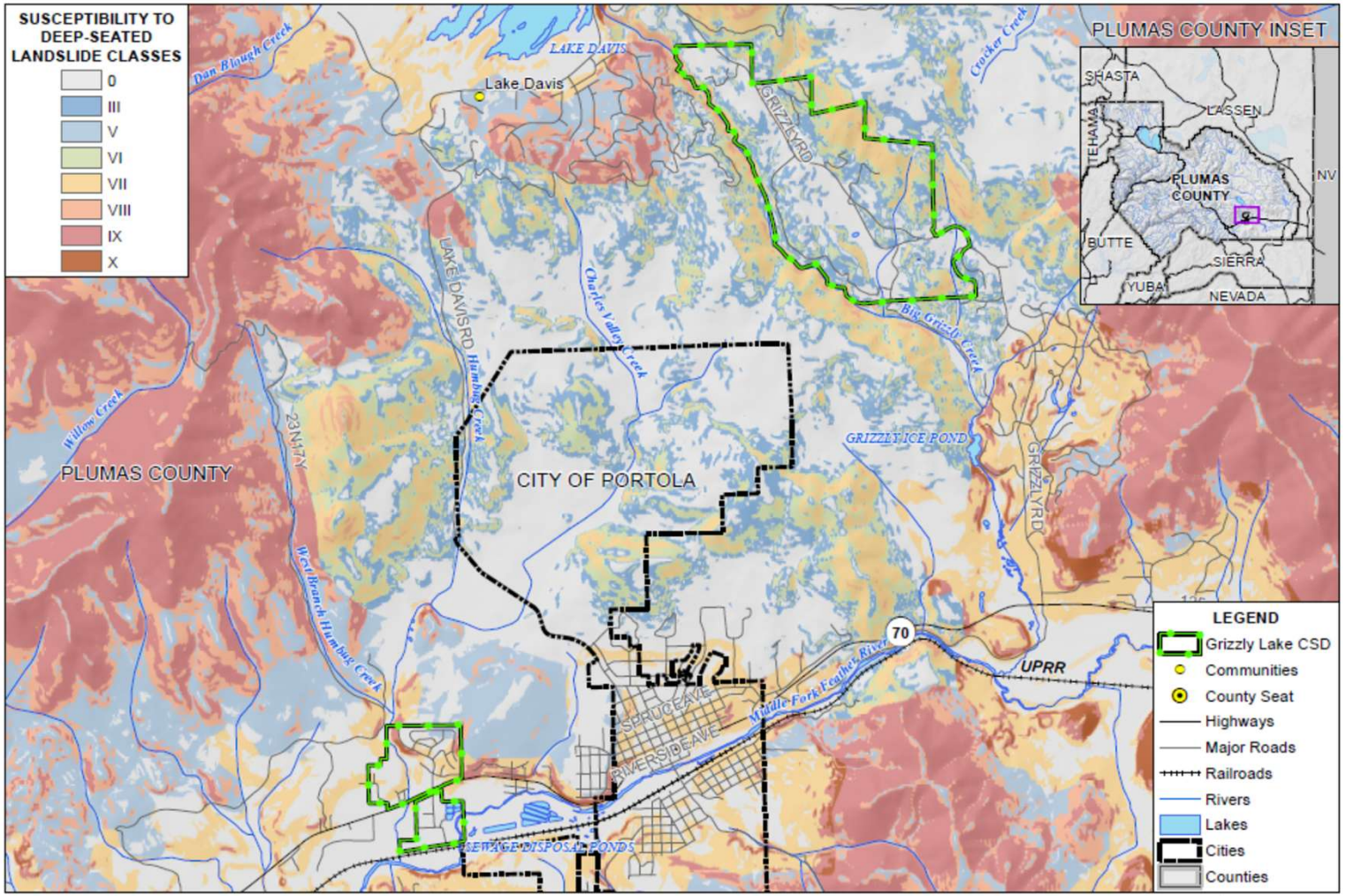
Landslide, Mudslide, & Debris Flow

Grizzly Lake CSD

Very High: (Class X)
High: (Classes VII, VIII, & IX)



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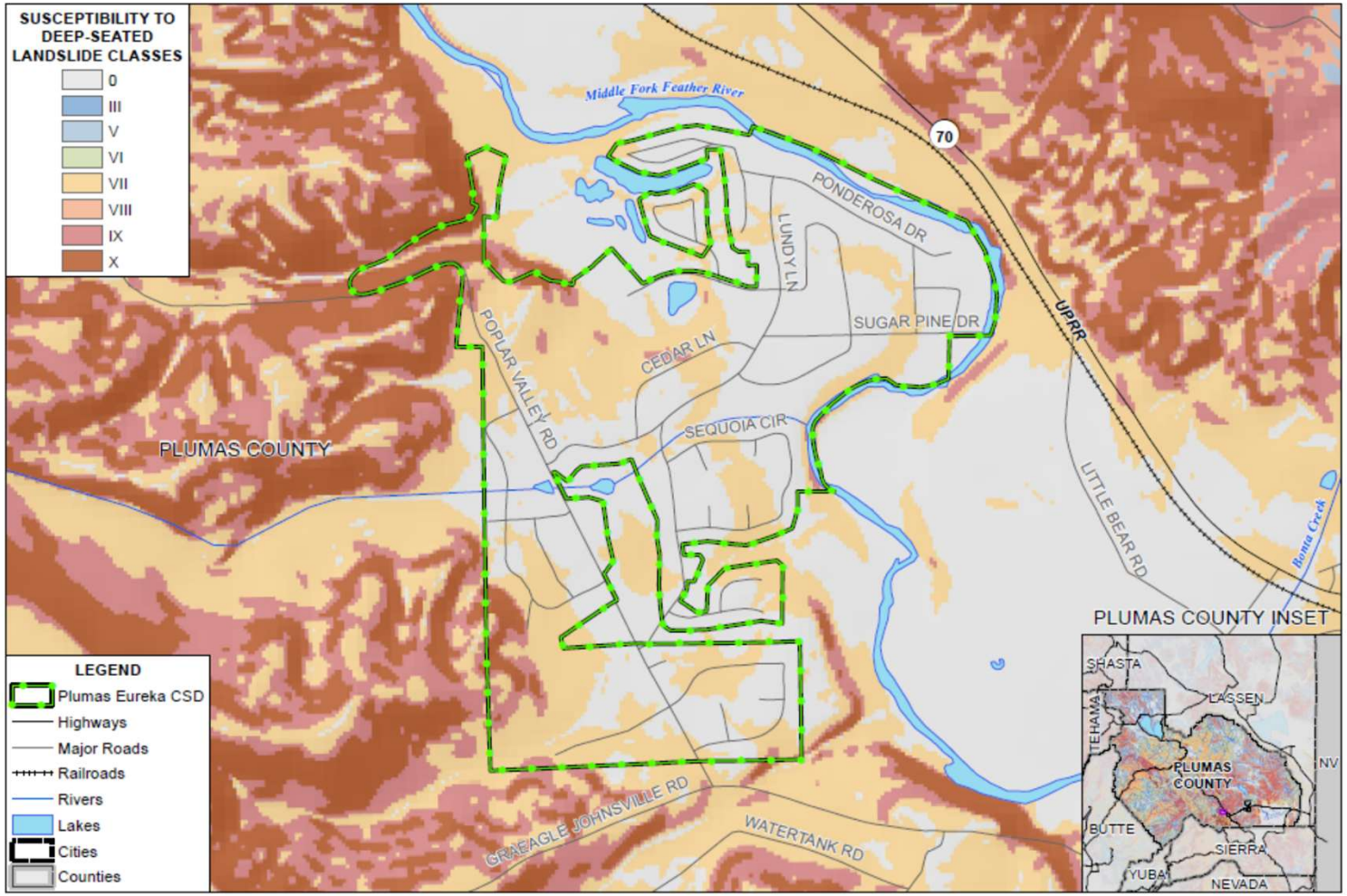
Landslide, Mudslide, & Debris Flow

Plumas Eureka CSD

Very High: (Class X)
High: (Classes VII, VIII, & IX)



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Landslide, Mudslide, & Debris Flow

Plumas County Planning Area

Geographic Extents

By Landslide Susceptibility

Deep Seated Landslide Class	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
0	271,919	21%	18,855	37%	253,064	20%
III	111,584	8%	2,642	5%	108,942	9%
V	171,336	13%	5,461	11%	165,875	13%
VI	110,921	8%	2,070	4%	108,851	9%
VII	224,714	17%	12,978	26%	211,736	17%
VIII	223,908	17%	2,775	5%	221,134	17%
IX	180,090	14%	4,158	8%	175,932	14%
X	21,719	2%	1,783	4%	19,936	2%
Grand Total	1,316,192	100%	50,723	100%	1,265,470	100%

FOSTER MORRISON CONSULTING

Landslide, Mudslide & Debris Flow

Plumas County Planning Area

Parcels, Structures, and Values at Risk

by Landslide Susceptibility

by Jurisdiction

Jurisdiction / Susceptibility to Deep-Seated Landslide Class	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola							
0	540	395	$12,942,889	$49,148,720	$53,696	$29,001,715	$91,147,020
III	2	0	$56,463	$0	$0	$0	$56,463
V	22	10	$560,793	$2,627,044	$0	$2,241,074	$5,428,911
VI	1	1	$21,106	$2,429	$0	$1,215	$24,750
VII	940	557	$19,519,134	$86,443,389	$1,678,026	$55,910,625	$163,551,174
VIII	2	1	$529,643	$1,400,712	$0	$1,400,712	$3,331,067
IX	105	48	$2,773,597	$6,470,686	$35,120	$3,507,842	$12,787,245
X	31	9	$1,546,746	$5,158,054	$148,230	$2,579,027	$9,432,057
Not in a Landslide Class	0	0	$0	$0	$0	$0	$0
City of Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686
Unincorporated Plumas County							
0	7,133	4,848	$377,748,466	$941,215,911	$98,515,649	$546,539,951	$1,964,019,977
III	426	188	$18,511,321	$33,844,115	$203,800	$17,392,879	$69,952,115
V	3,478	1,991	$313,658,890	$620,338,134	$1,853,913	$316,361,786	$1,252,212,723
VI	447	184	$18,609,277	$30,571,867	$183,993	$15,715,842	$65,080,979
VII	4,899	2,847	$282,021,385	$605,509,339	$6,302,556	$319,914,993	$1,213,748,273
VIII	2,196	970	$191,923,312	$284,500,071	$1,141,051	$150,585,108	$628,149,542
IX	3,466	1,486	$293,745,442	$446,129,929	$2,611,482	$230,868,937	$973,355,790
X	2,188	912	$167,960,204	$239,869,245	$30,715,119	$136,295,794	$574,840,362
Not in a Landslide Class	1	1	$816,431	$966,667	$0	$483,334	$2,266,432
Unincorporated Plumas County Total	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191

FOSTER MORRISON CONSULTING

Landslide, Mudslide & Debris Flow

Unincorporated Plumas County

Parcels, Structures, and Values at Risk

Landslide Susceptibility (Class X – Very High)

by Property Use

Susceptibility to Deep-Seated Landslide Class / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
X							
Agricultural	247	44	$17,351,867	$8,534,676	$861,612	$8,534,676	$35,282,831
Commercial	35	21	$4,689,342	$11,409,329	$24,008,160	$11,409,329	$51,516,160
Federal Lands	95	0	$0	$0	$0	$0	$0
Government	136	0	$0	$0	$0	$0	$0
Industrial	1	0	$90,337	$0	$0	$0	$90,337
Institutional	4	3	$197,556	$1,777,668	$6,650	$1,777,668	$3,759,542
Miscellaneous	4	0	$0	$0	$0	$0	$0
Recreational	22	14	$4,347,966	$11,000,669	$496,443	$11,000,669	$26,845,747
Residential	1,527	830	$141,283,136	$207,146,903	$5,342,254	$103,573,452	$457,345,745
ROW/Utilities	117	0	$0	$0	$0	$0	$0
X Total	2,188	912	$167,960,204	$239,869,245	$30,715,119	$136,295,794	$574,840,362

FOSTER MORRISON CONSULTING

Landslide, Mudslide, Debris Flow

Plumas County Planning Area

Populations at Risk

by Landslide Susceptibility Class by Jurisdiction

Deep Seated Landslide Class/Jurisdiction	Improved Residential Parcels	Population at Risk
Class VII		
City of Portola	513	1,175
Unincorporated County	2,710	6,477
Class VIII		
City of Portola	0	0
Unincorporated County	933	2,230
Class IX		
City of Portola	44	101
Unincorporated County	1,444	3,451
Class X		
City of Portola	9	21
Unincorporated County	830	1,984

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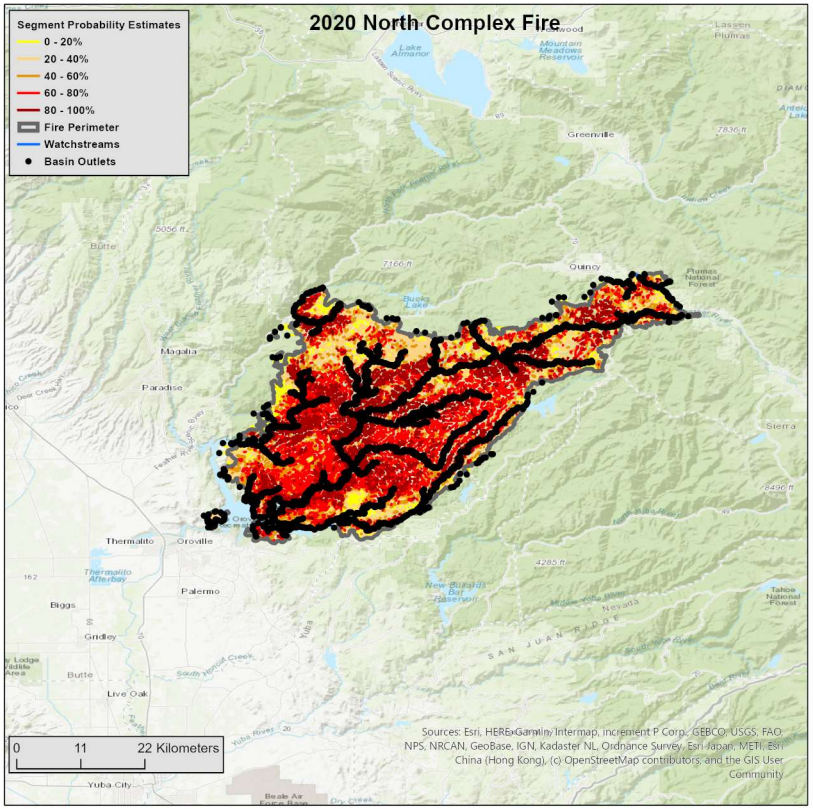
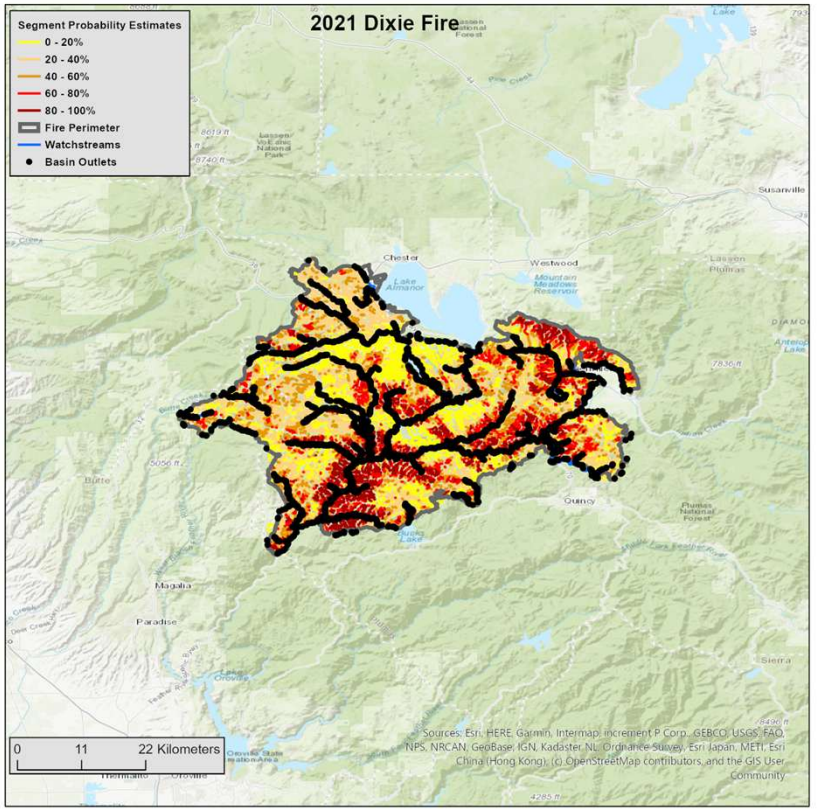
Landslide, Mudslide, Debris Flow

Post-Wildfire Debris Flow Areas

– 2020 North Complex Fire

– 2021 Dixie Fire





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Volcano

Plumas County Planning Area

Volcano Threat near Plumas County

Volcano	Lassen Volcanic Center
Threat	Very High Threat
Details	Lassen Volcanic National Park, located about 50 miles east of Redding, showcases the dynamic history of this area and draws more than 350,000 visitors each year. Lassen Peak erupted violently in the early twentieth century.

Source: USGS Fact Sheet 2014-3120

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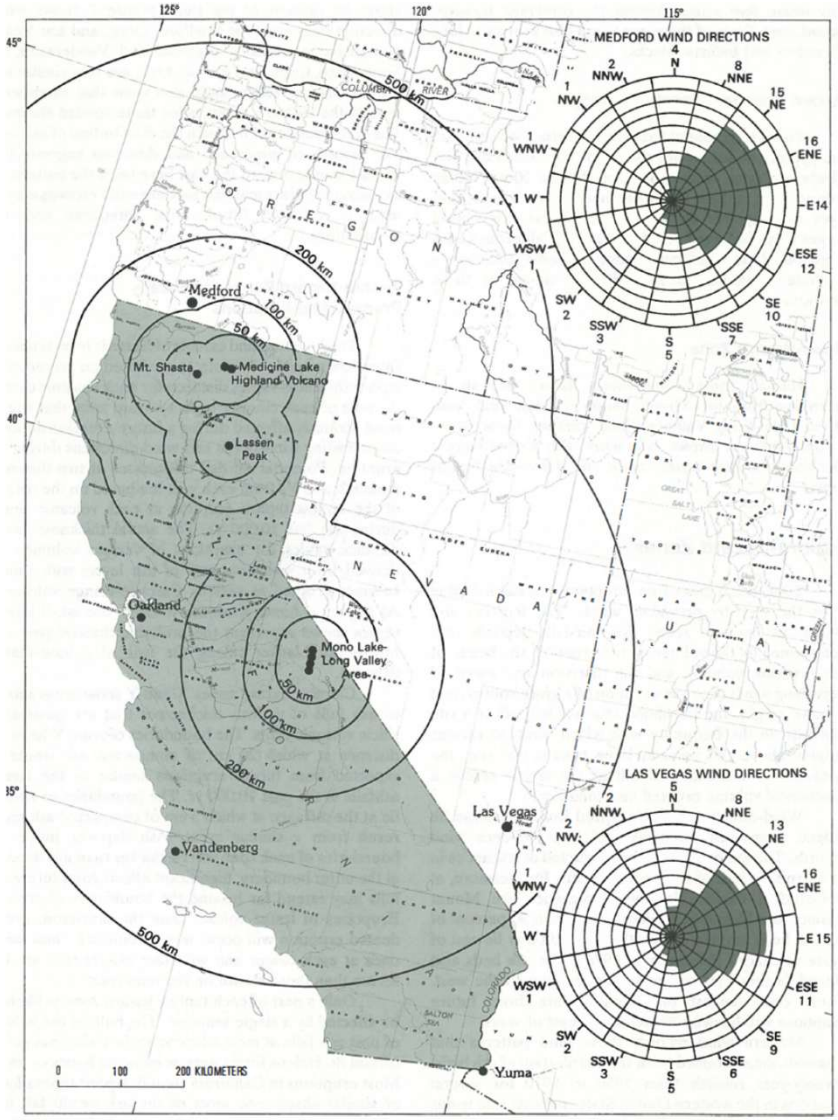
Volcano

Plumas County Planning Area

Volcano Ashfall Map



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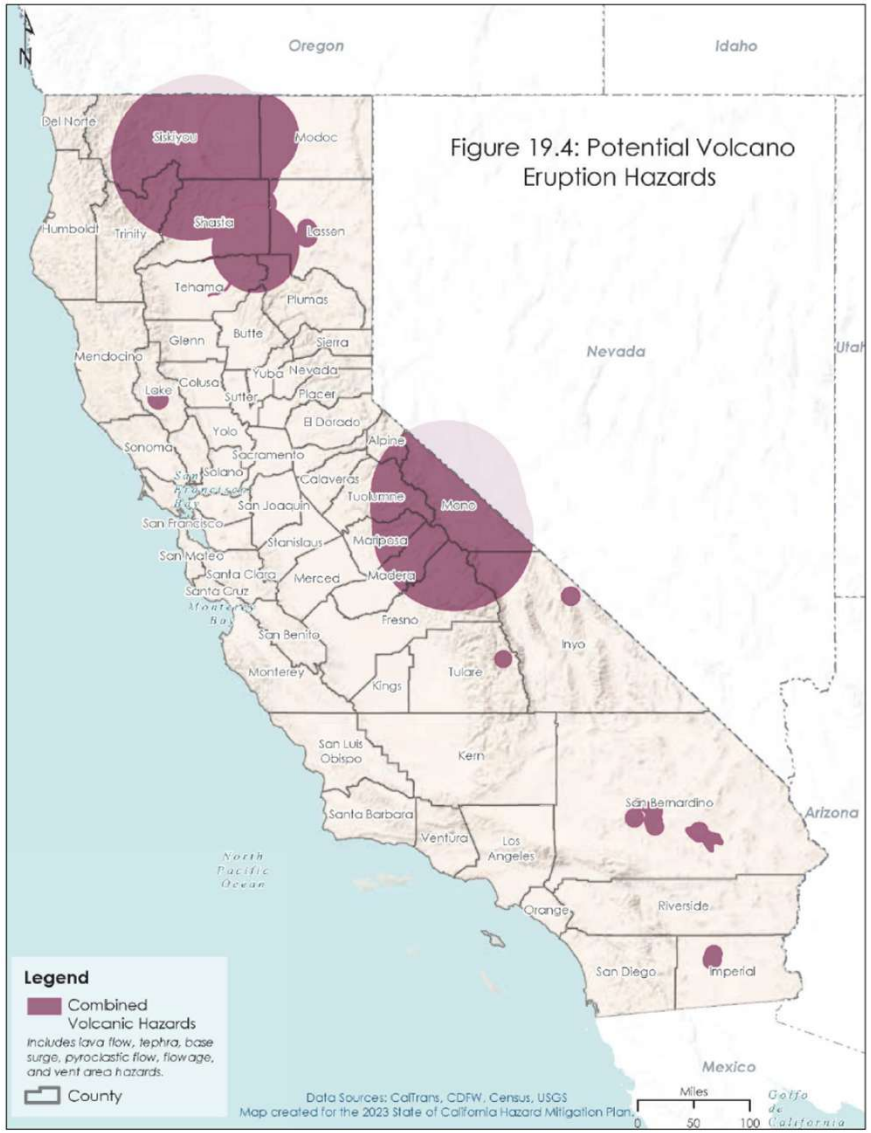
Volcano

Plumas County Planning Area

Potential Volcano Eruption Hazards



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Wildfire

Plumas County Planning Area

Federal and State Disaster Declarations Summary 1950-2025 for Wildfire

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Fire	7	1960 (unnamed), 1987(unnamed), 1999 (unnamed), 2020 (twice – Bear Fire, North Complex Fire), 2021 (three – Dixie Fire, Monument Fire, Lava Fire/Beckwourth Complex)	6	1999 (unnamed), 2008 (BTU Lightning Complex), 2020 (twice – Bear Fire, North Complex Fire), 2021 (twice – Dixie Fire, Lava Fire/Beckwourth Complex)

Plumas County NCDC Wildfire Events 1/1/1996-7/31/2025

Event Type	Number of Events	Deaths	Deaths (indirect)	Injuries	Injuries (indirect)	Property Damage	Crop Damage
Dense Smoke	1	0	0	0	0	$0	$0
Wildfire	14	1	0	3	0	$22,775,000	$0
Total	15	1	0	3	0	$22,775,000	$ 0

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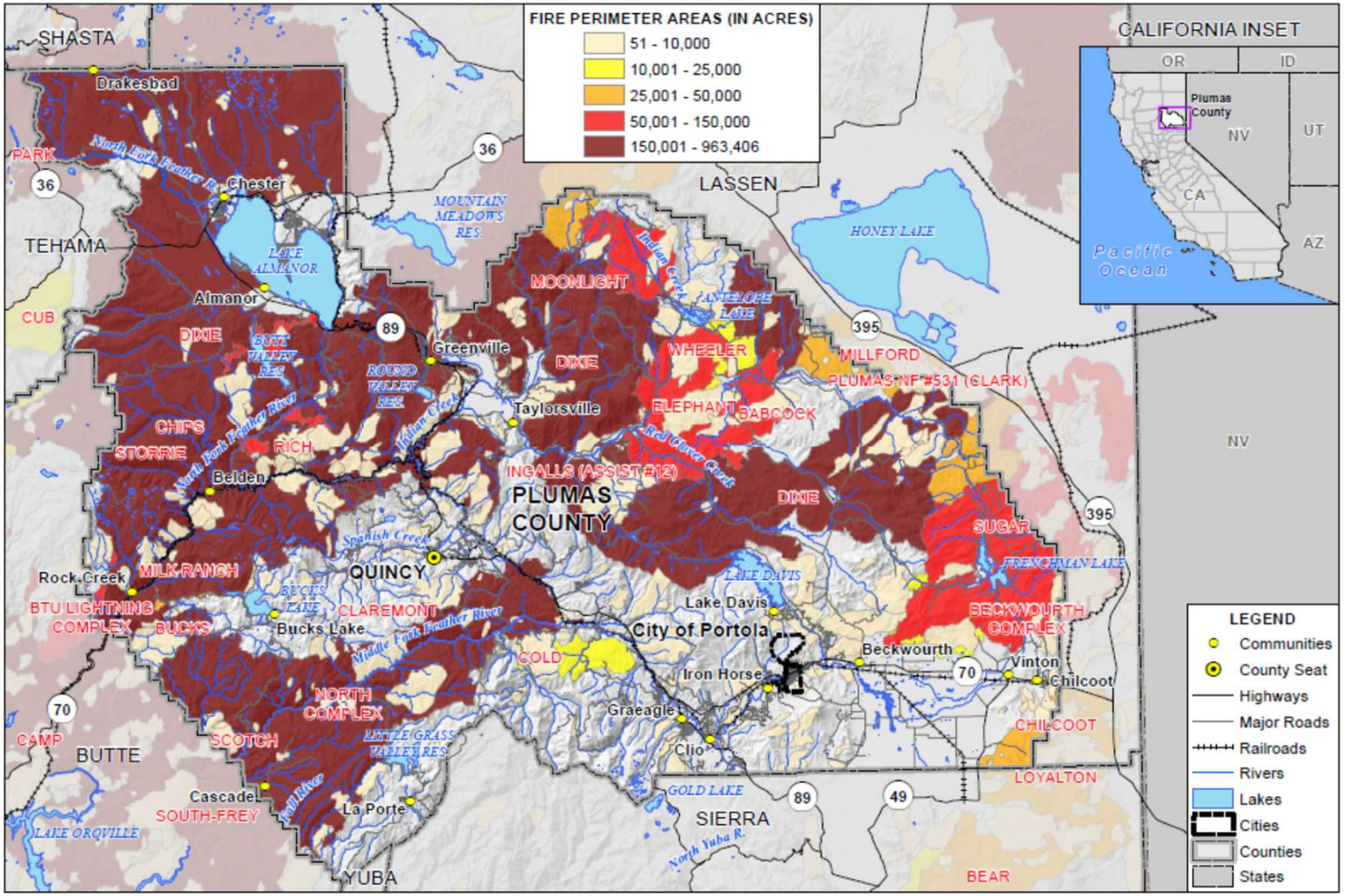
Wildfire

Plumas County Planning Area

Fire History Map



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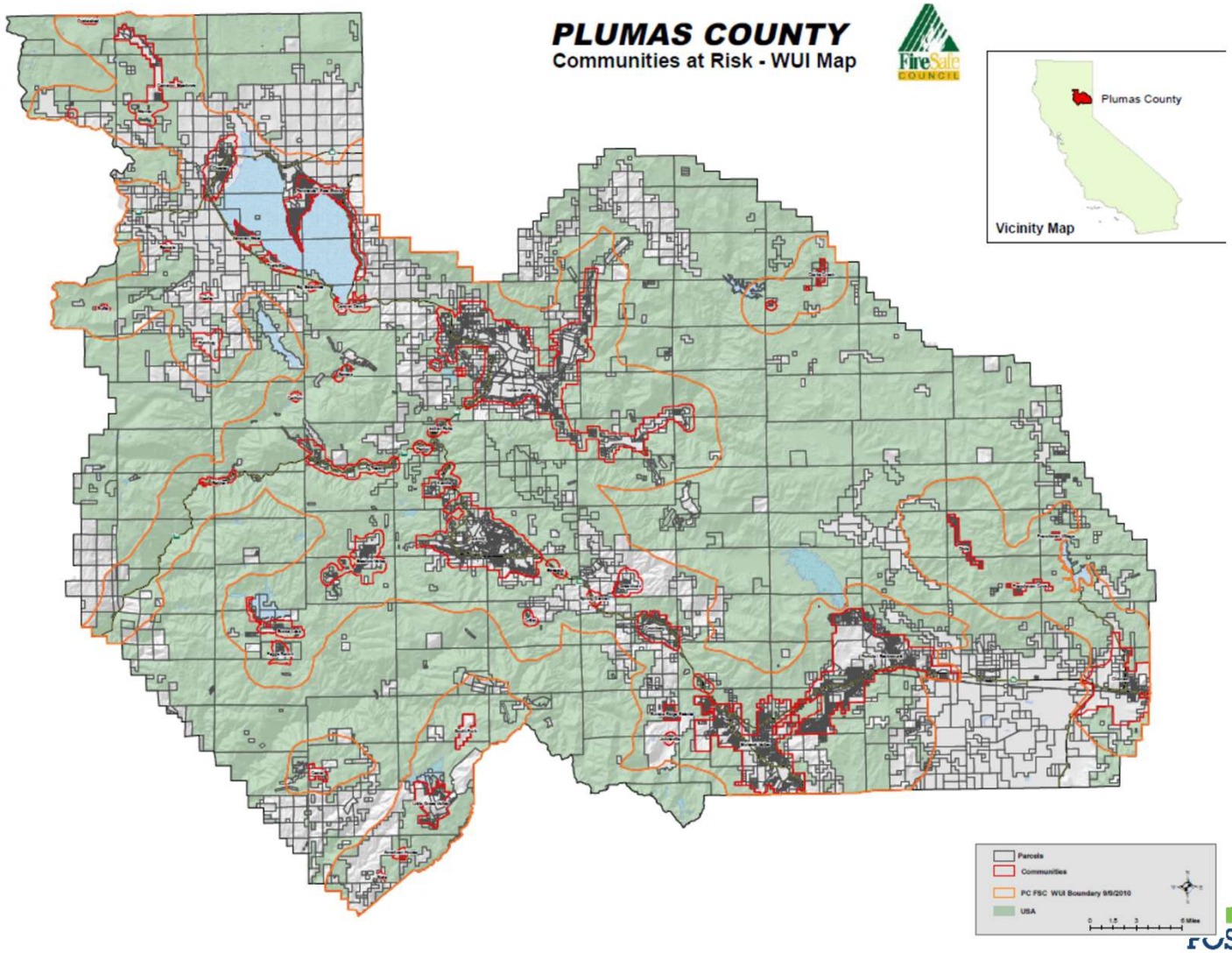
Wildfire

Plumas County Planning Area

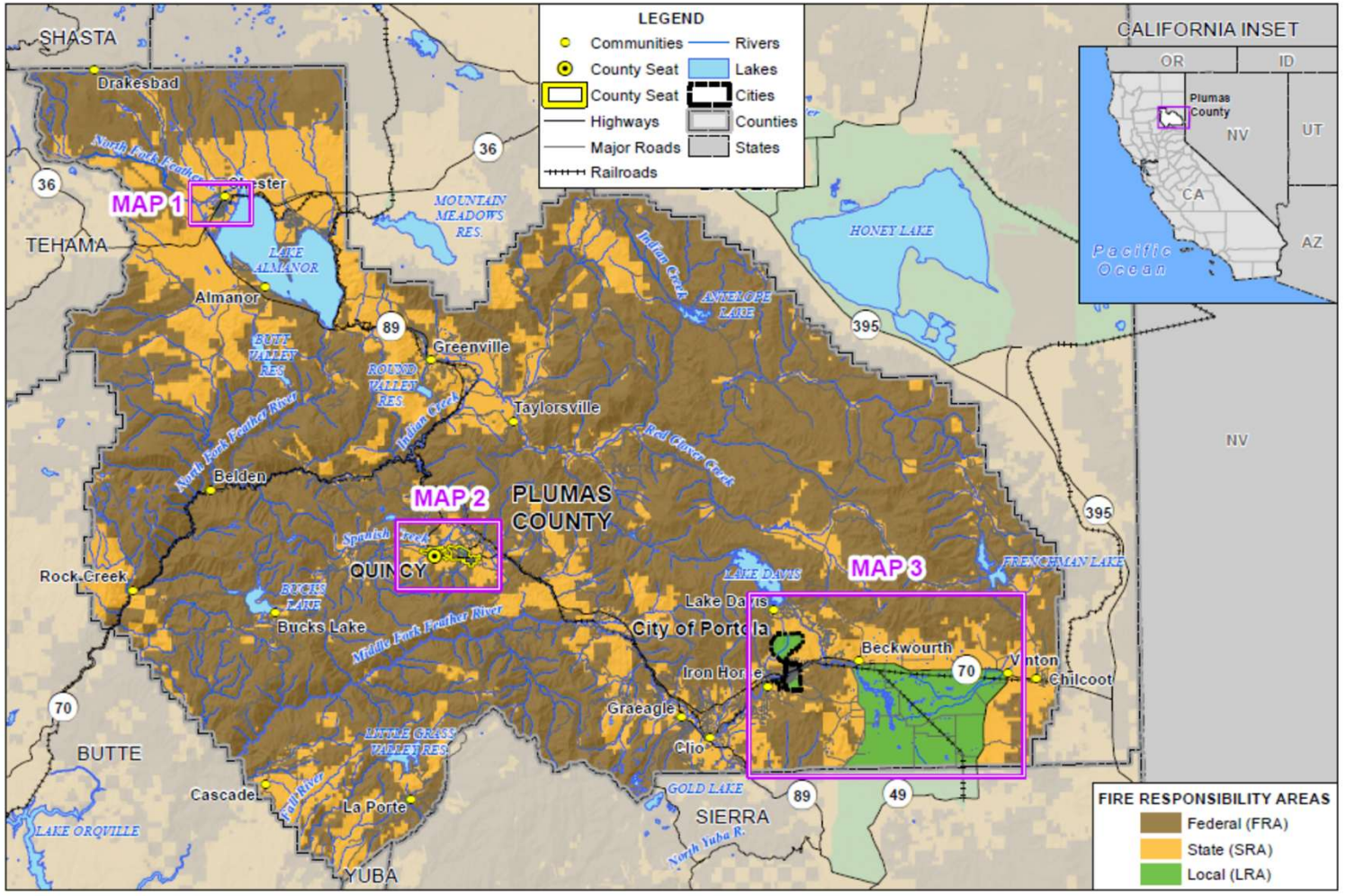
Wildland Urban Interface



Wildfire

Plumas County Planning Area

Fire Responsibility Areas



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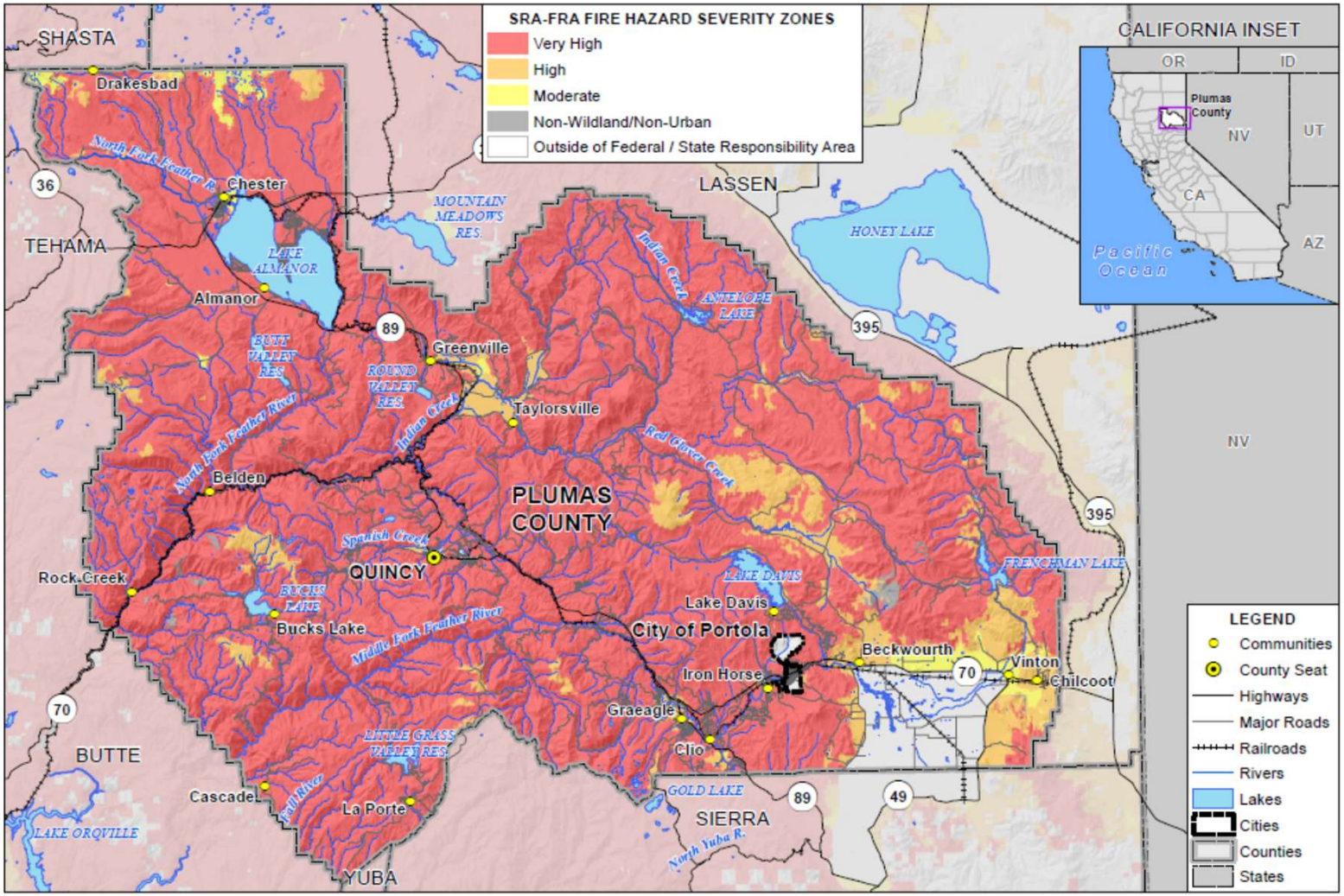
Wildfire

Plumas County Planning Area

SRA/FRA Fire Hazard Severity Zones



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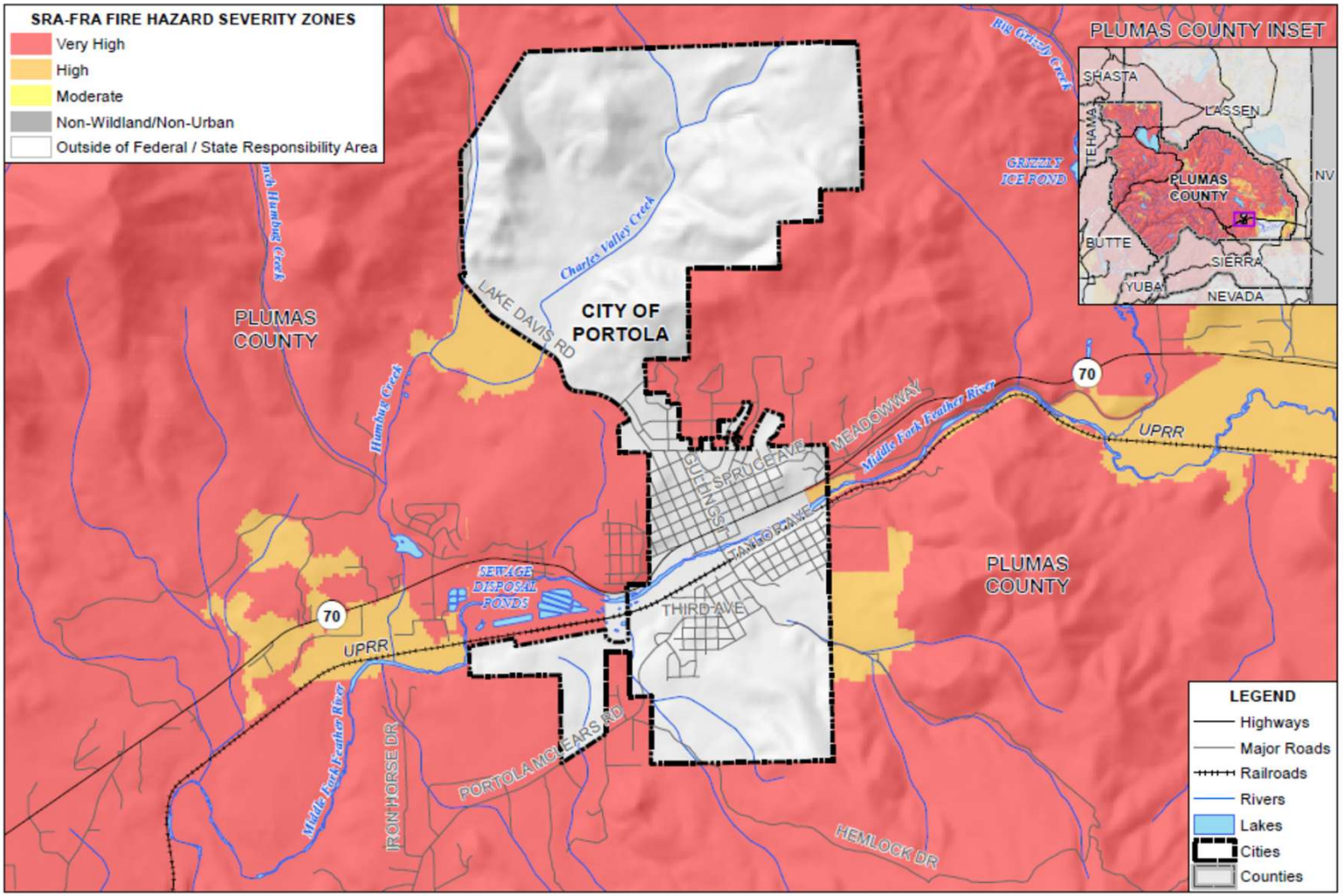
Wildfire

SRA/FRA
Fire Hazard
Severity Zones

Portola



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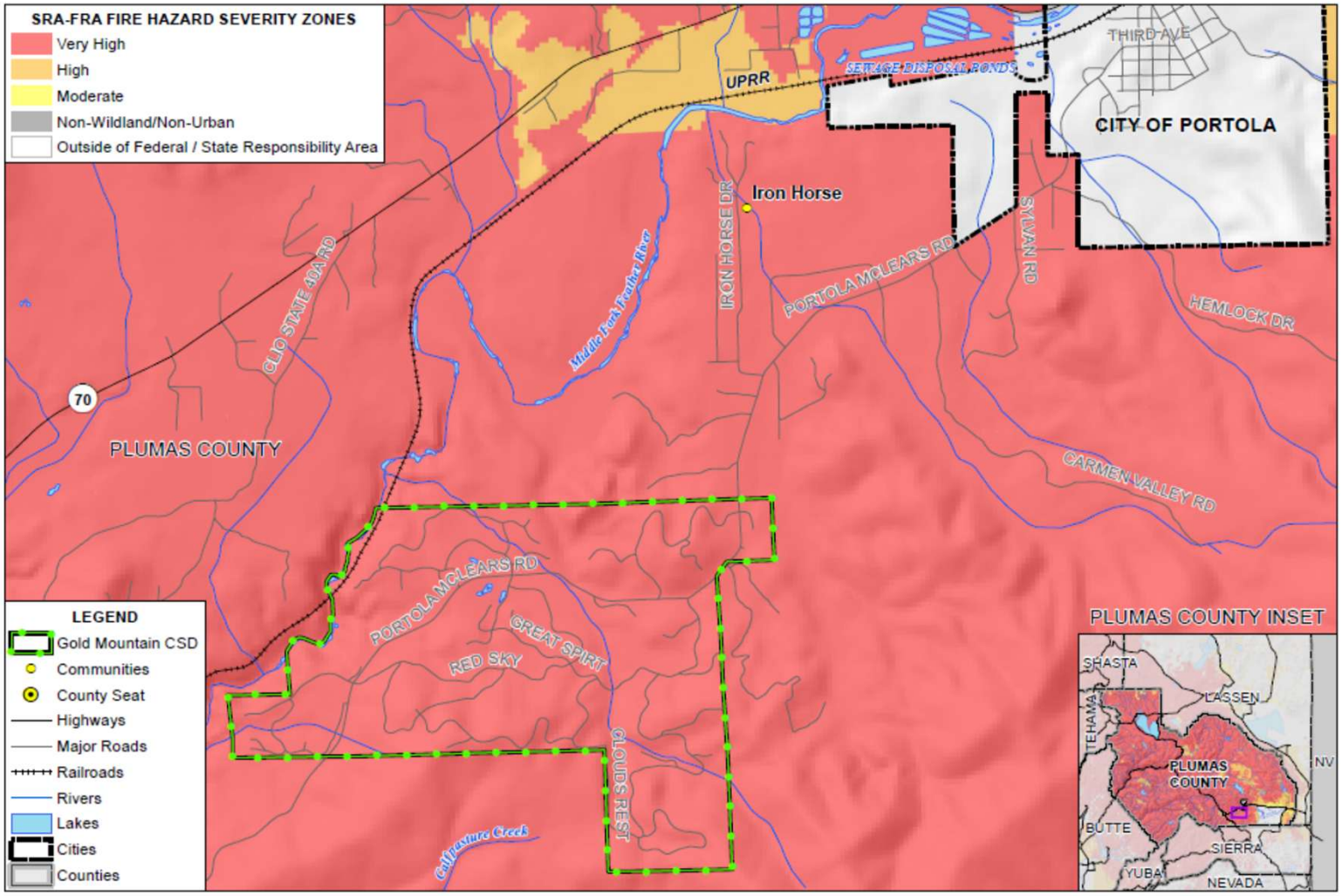
Wildfire

SRA/FRA
Fire Hazard
Severity Zones

Gold Mountain
CSD



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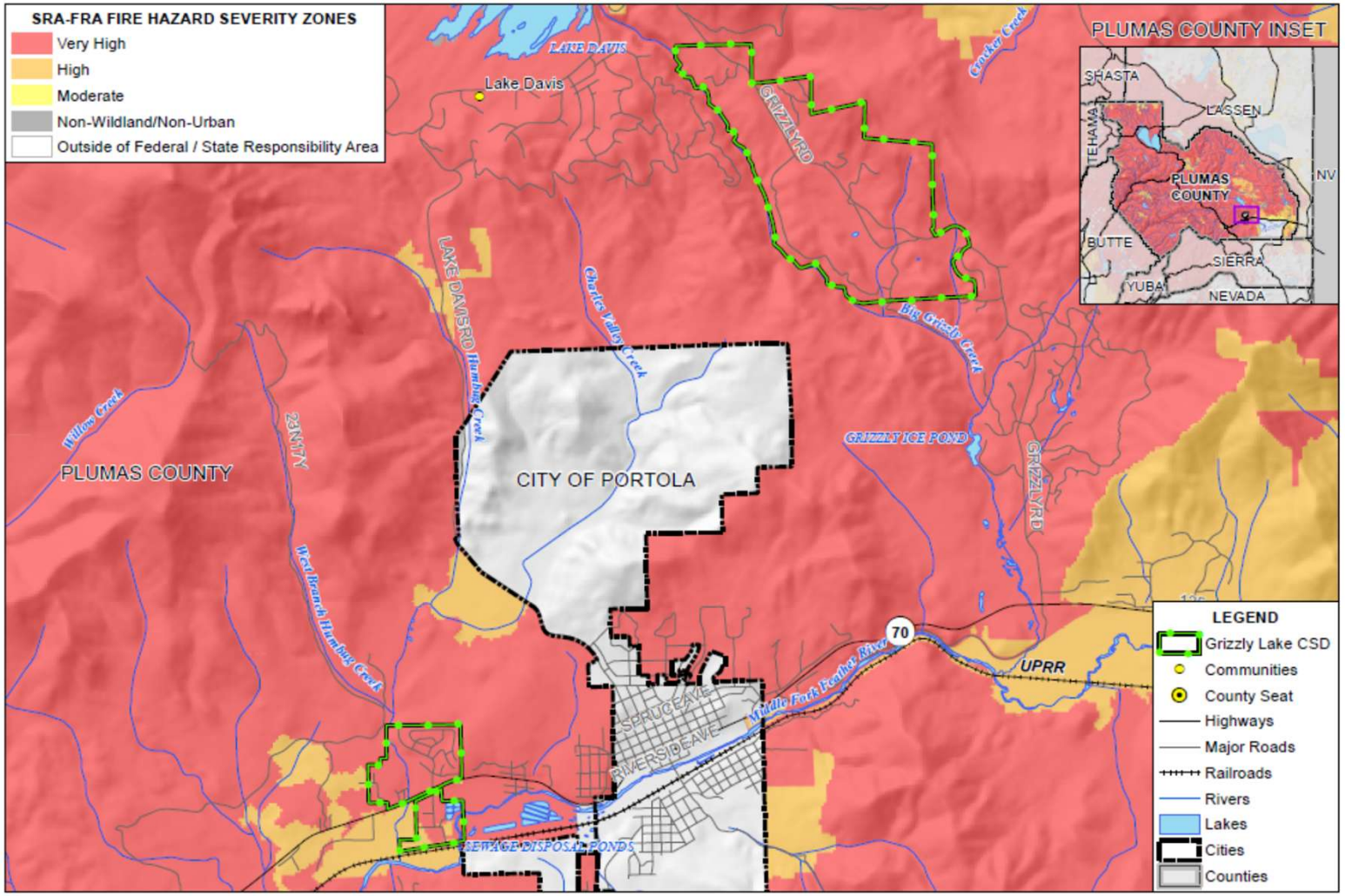
Wildfire

SRA/FRA
Fire Hazard
Severity Zones

Grizzly Lake CSD



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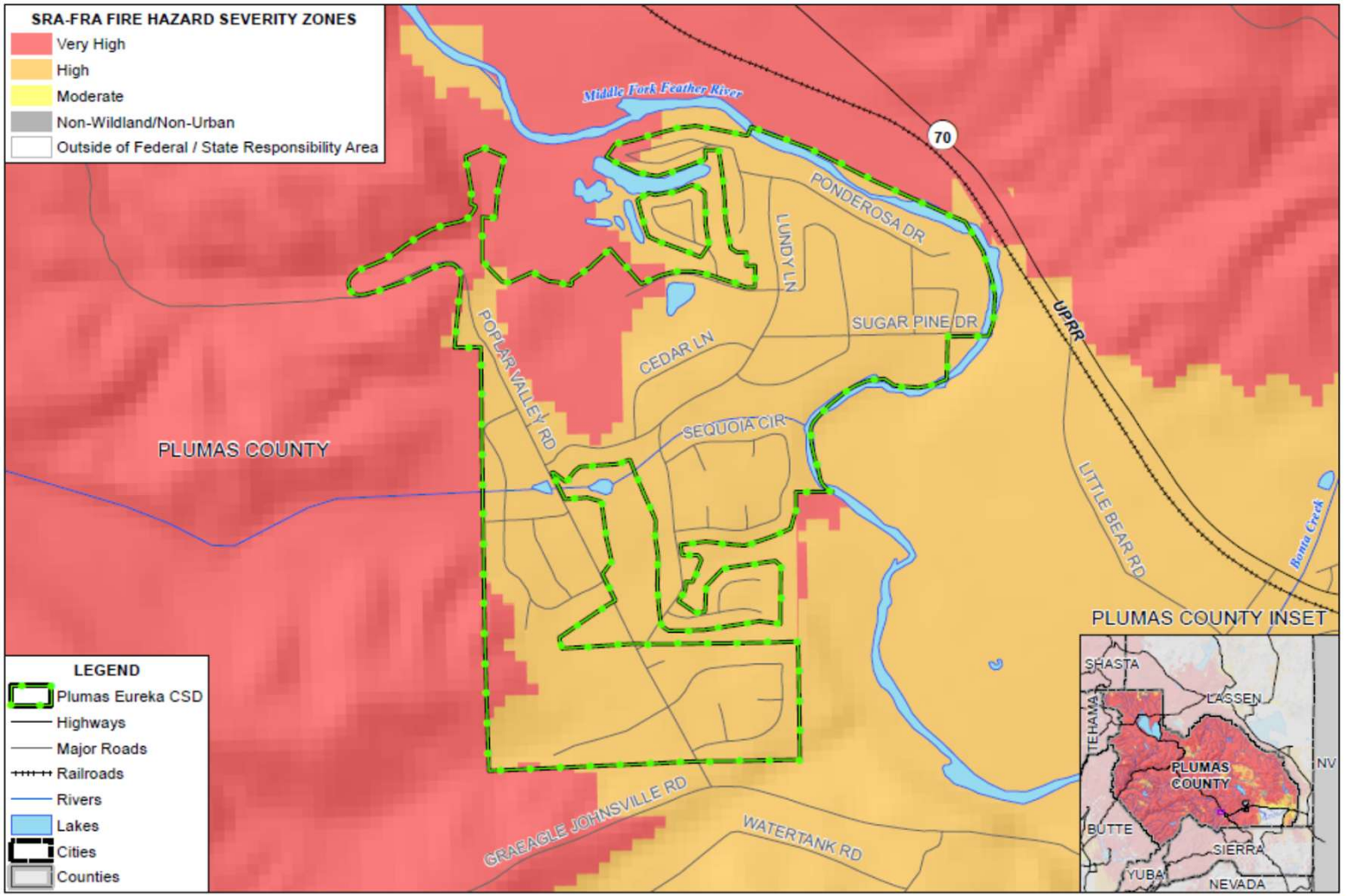
Wildfire

SRA/FRA
Fire Hazard
Severity Zones

Plumas Eureka
CSD



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Wildfire

Plumas County Planning Area

Geographic Extents

By SRA/FRA Fire Hazard Severity Zone

SRA/FRA Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	1,454,537	87.0%	40,742	43.8%	1,413,795	89.5%
High	116,710	7.0%	19,400	20.9%	97,310	6.2%
Moderate	39,004	2.3%	6,405	6.9%	32,599	2.1%
Non-Wildland/Non-Urban	13,602	0.8%	0.01	0.00001%	13,602	0.9%
Outside of Federal / State Responsibility Area	48,255	2.9%	26,449	28.4%	21,807	1.4%
Grand Total	1,672,109	100.0%	92,996	100.0%	1,579,113	100.0%

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Wildfire

Plumas County Planning Area

Parcels, Structures, and Values at Risk

By SRA/FRA Fire Hazard Severity Zone

by Jurisdiction

Jurisdiction / SRA/FRA Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola							
Very High*	92	31	$4,749,530	$10,547,742	$12,605	$6,035,035	$21,344,912
High*	2	0	$76,842	$0	$0	$0	$76,842
Moderate	0	0	$0	$0	$0	$0	
Non-Wildland/Non-Urban	0	0	$0	$0	$0	$0	$0
Outside of State/ Federal Responsibility Area	1,549	990	$33,123,999	$140,703,292	$1,902,467	$88,607,174	$264,336,932
City of Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686
Unincorporated Plumas County							
Very High	19,315	9,693	$1,383,692,274	$2,467,545,493	$41,465,180	$1,302,647,402	$5,195,350,349
High	2,252	1,542	$143,214,394	$357,339,463	$5,071,453	$194,104,091	$699,729,401
Moderate	159	108	$11,808,219	$16,685,606	$318,296	$9,002,272	$37,814,393
Non-Wildland/Non-Urban	1	0	$91,800	$0	$0	$0	$91,800
Outside of State/ Federal Responsibility Area	2,507	2,084	$126,188,041	$361,374,716	$94,672,634	$228,404,857	$810,640,248
Unincorporated Plumas County Total	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191

*Note: the presence of Very High and High FHSZs (SRA/FRA) for Portola is because the jurisdictional boundary for the City varies between the CAL FIRE GIS data and the County/City GIS data. It is assumed that the entirety of the City falls outside of the State/Federal Responsibility Areas and are all included in the Local Responsibility mapping.

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Wildfire

Unincorporated Plumas County

Parcels, Structures, and Values at Risk

By SRA/FRA Fire Hazard Severity Zone (High and Very High FHSZs)

By Property Use

SRA/FRA FHSZ / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
Very High							
Agricultural	1,149	65	$46,154,317	$15,340,446	$986,996	$15,340,446	$77,822,205
Commercial	458	242	$42,543,301	$75,736,553	$26,524,529	$75,736,553	$220,540,936
Federal Lands	212	0	$0	$0	$0	$0	$0
Government	509	0	$124,956	$0	$0	$0	$124,956
Industrial	72	40	$5,519,454	$7,103,600	$10,600	$10,655,400	$23,289,054
Institutional	43	19	$1,512,925	$10,149,108	$26,990	$10,149,108	$21,838,131
Miscellaneous	25	0	$9,591	$0	$0	$0	$9,591
Recreational	471	52	$16,440,859	$22,316,004	$1,773,985	$22,316,004	$62,846,852
Residential	15,474	9,275	$1,271,386,871	$2,336,899,782	$12,142,080	$1,168,449,891	$4,788,878,624
ROW/Utilities	902	0	$0	$0	$0	$0	$0
Very High Total	19,315	9,693	$1,383,692,274	$2,467,545,493	$41,465,180	$1,302,647,402	$5,195,350,349
High							
Agricultural	79	26	$10,317,552	$5,546,971	$225,254	$5,546,971	$21,636,748
Commercial	65	47	$4,611,970	$14,771,694	$3,919,965	$14,771,694	$38,075,323
Federal Lands	5	0	$0	$0	$0	$0	$0
Government	53	0	$0	$0	$0	$0	$0
Industrial	26	15	$1,341,184	$3,809,343	$0	$5,714,015	$10,864,542
Institutional	8	1	$49,910	$300,000	$0	$300,000	$649,910
Recreational	47	38	$1,696,229	$2,631,367	$40,139	$2,631,367	$6,999,102
Residential	1,875	1,415	$125,197,549	$330,280,088	$886,095	$165,140,044	$621,503,776
ROW/Utilities	94	0	$0	$0	$0	$0	$0
High Total	2,252	1,542	$143,214,394	$357,339,463	$5,071,453	$194,104,0[illegible]	$[illegible]

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Wildfire

Plumas County Planning Area

Populations at Risk

By Cal Fire FRA/SRA FHSZs and Jurisdiction *(Moderate or Higher)*

SRA/FRA Fire Hazard Severity Zone/Jurisdiction	Improved Residential Parcels	Population at Risk
Moderate		
City of Portola	0	0
Unincorporated County	98	234
High		
City of Portola	0	0
Unincorporated County	1,415	3,382
Very High		
City of Portola*	29	66
Unincorporated County	9,275	22,167

*Note: the presence of Very High and High FHSZs (SRA/FRA) for Portola is because the jurisdictional boundary for the City varies between the CAL FIRE GIS data and the County/City GIS data. It is assumed that the entirety of the City falls outside of the State/Federal Responsibility Areas and are all included in the Local Responsibility mapping.

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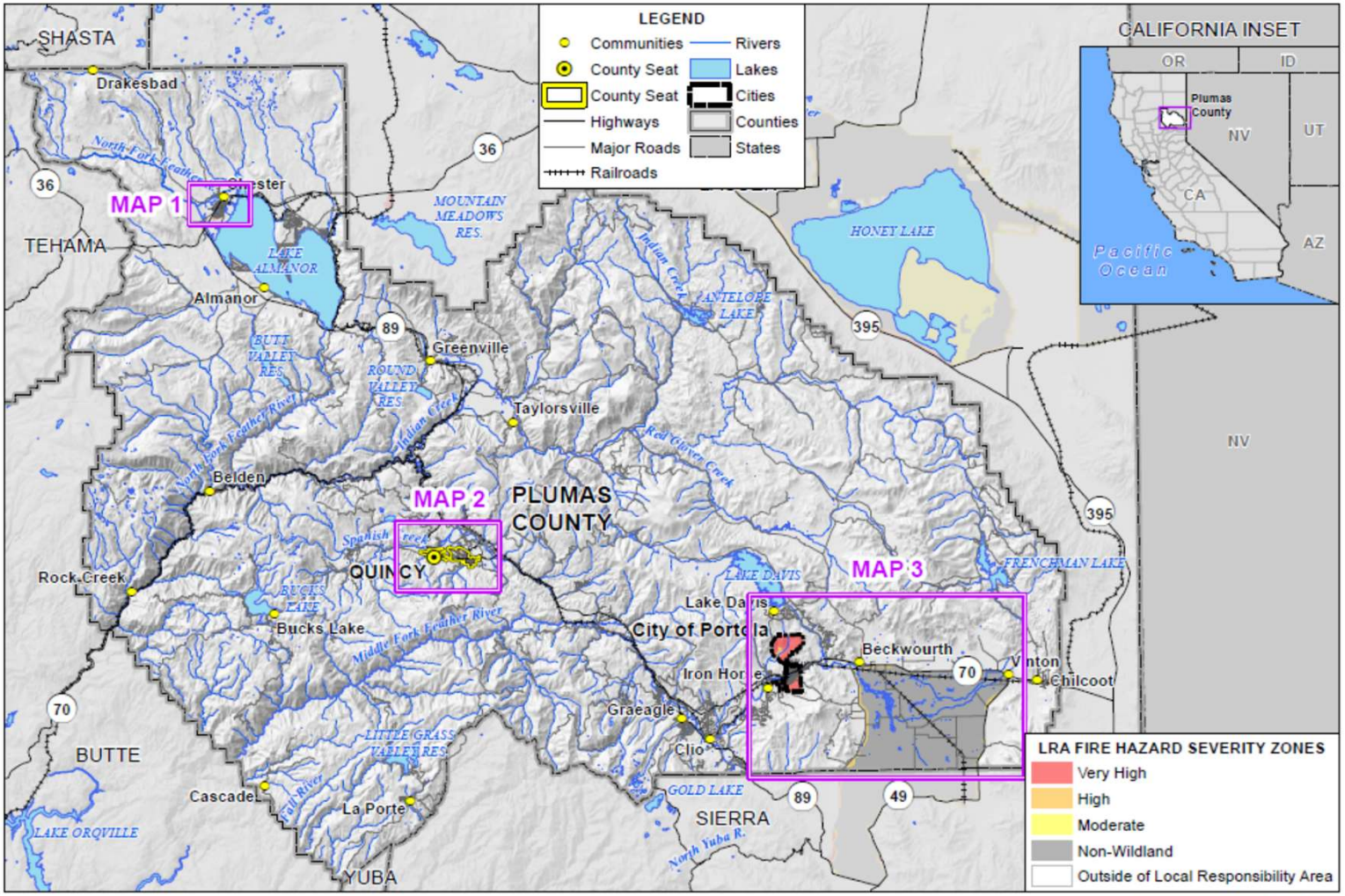
Wildfire

Plumas County Planning Area

LRA Fire Hazard Severity Zones (Map 0)



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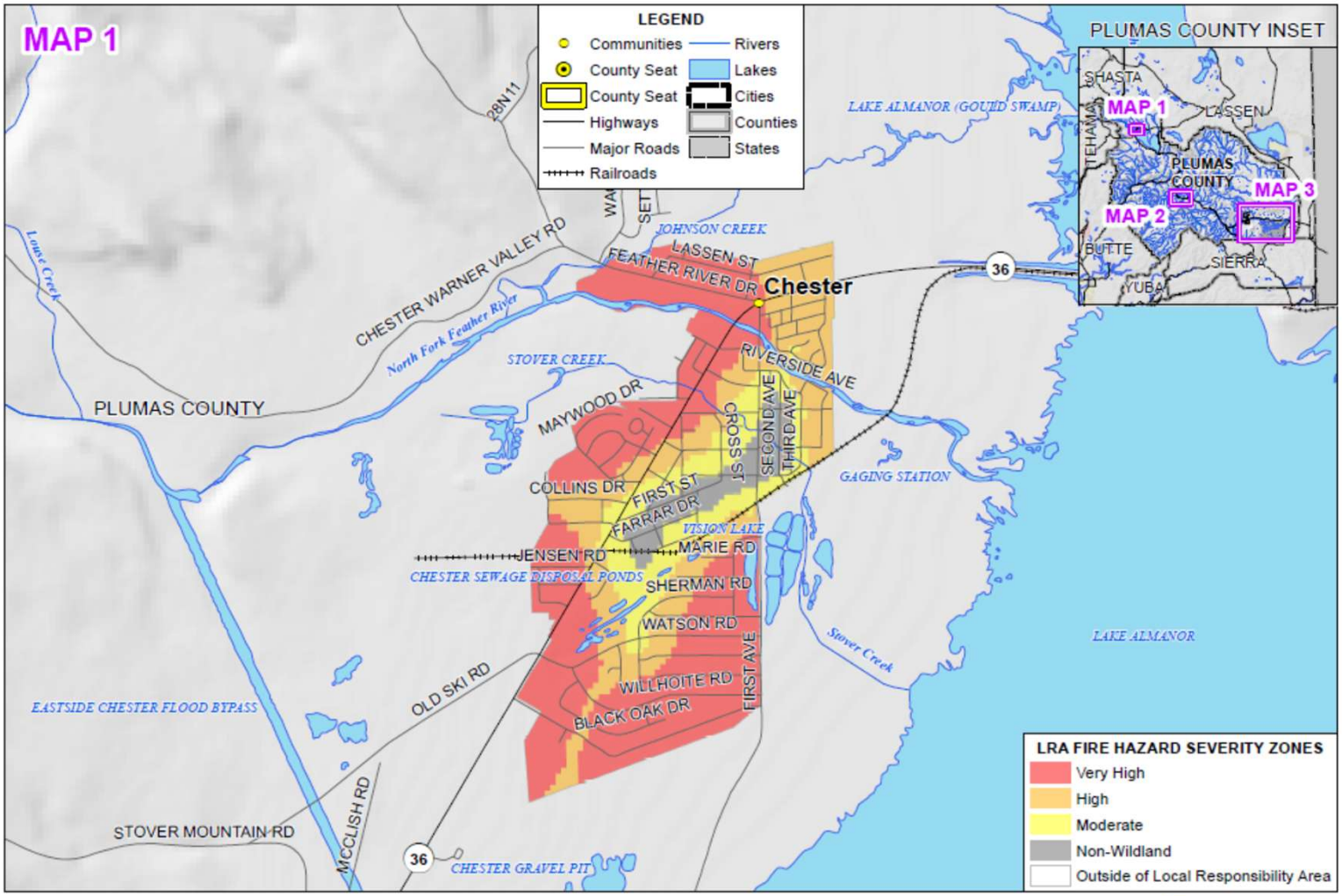
Wildfire

Plumas County Planning Area

LRA Fire Hazard Severity Zones (Map 1)



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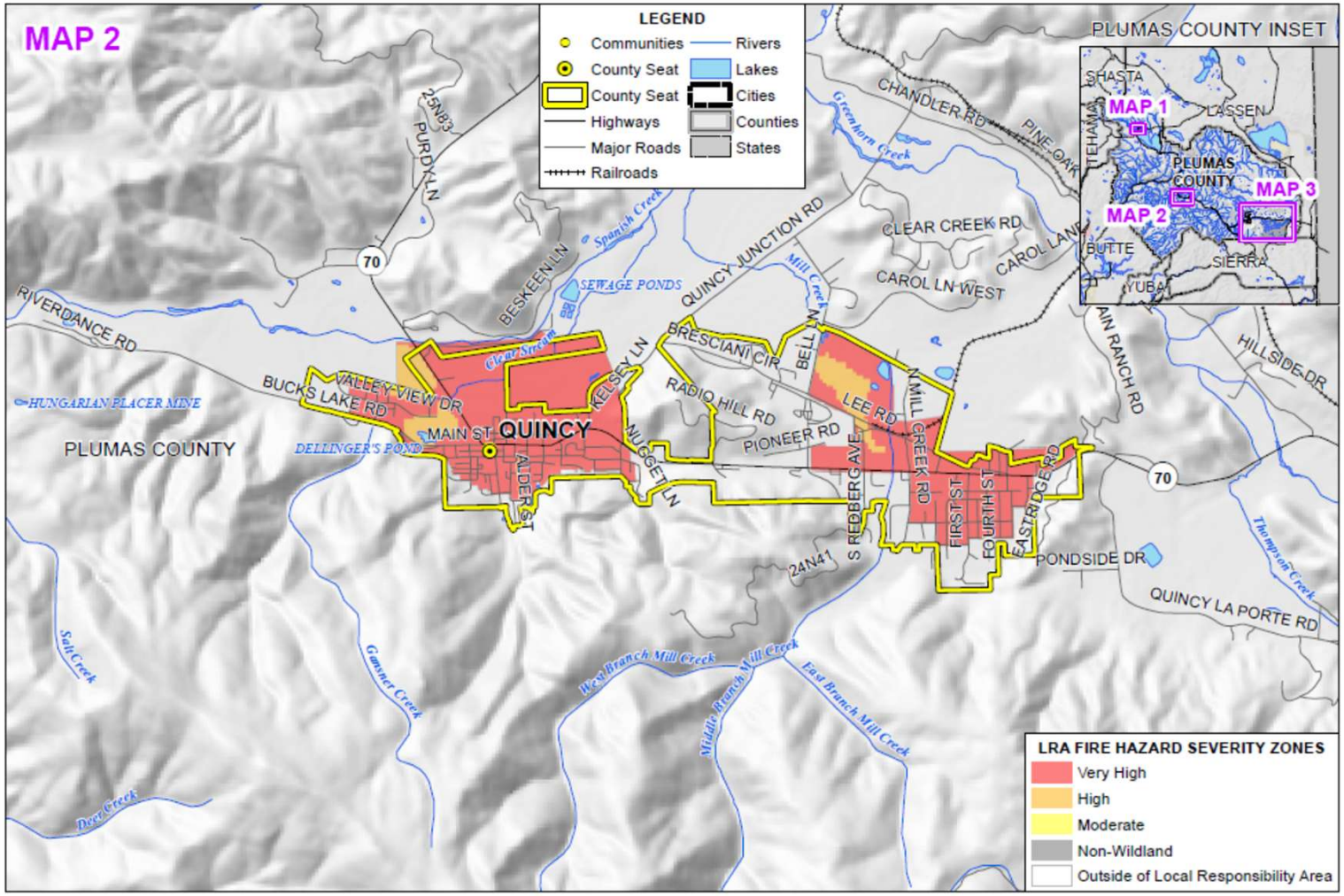
Wildfire

Plumas County Planning Area

LRA Fire Hazard Severity Zones (Map 2)



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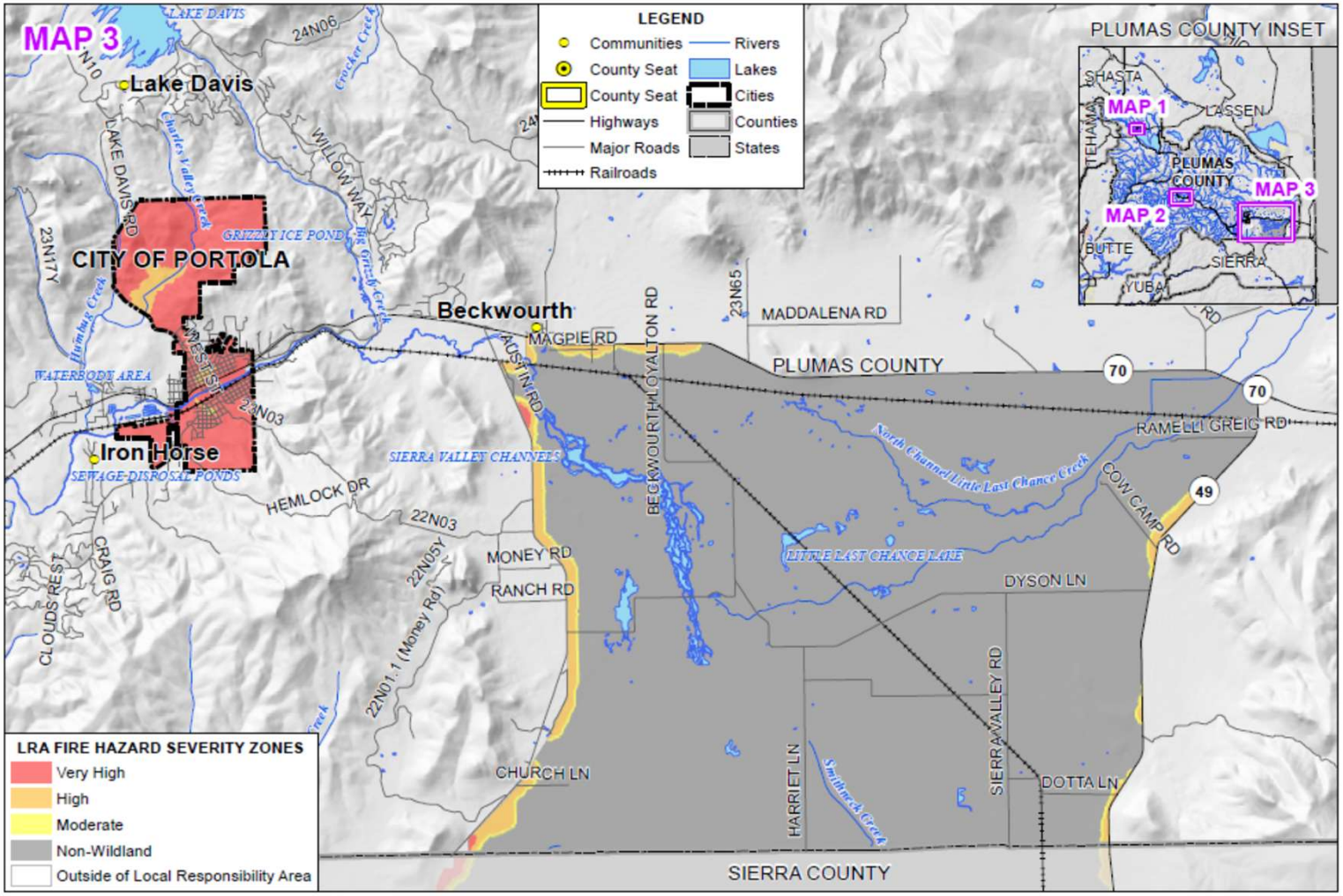
Wildfire

Plumas County Planning Area

LRA Fire Hazard Severity Zones (Map 3)



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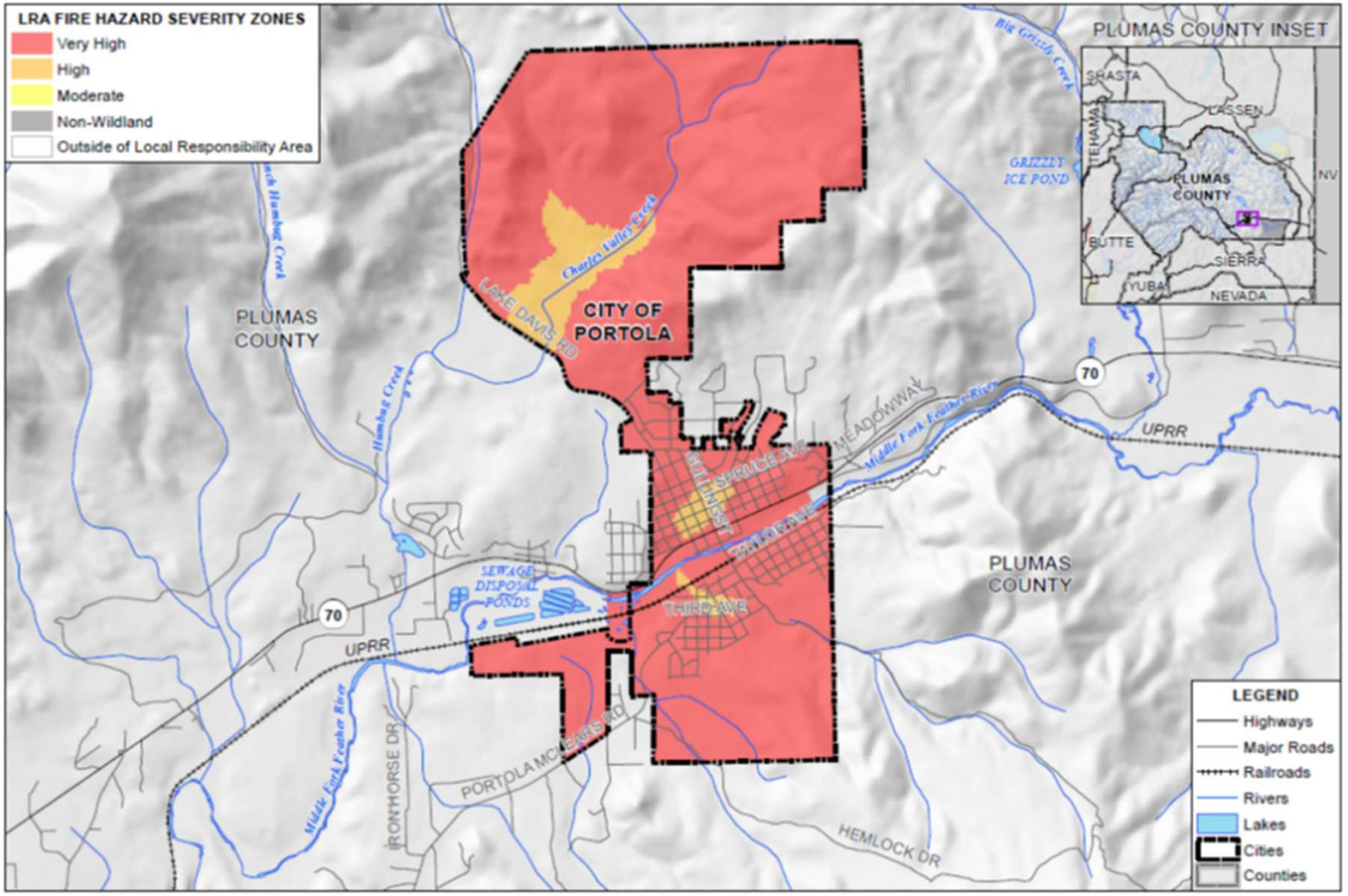
Wildfire

LRA
Fire Hazard
Severity Zones

Portola



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Wildfire

Plumas County Planning Area

Geographic Extents

By LRA Fire Hazard Severity Zone

LRA Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	4,636	0.3%	2,758	3.0%	1,877	0.1%
High	1,529	0.1%	810	0.9%	719	0.05%
Moderate	488	0.03%	258	0.3%	230	0.01%
Non-Wildland	41,625	2.5%	22,641	24.3%	18,984	1.2%
Outside of Local Responsibility Area	1,623,217	97.1%	66,542	71.5%	1,556,676	98.6%
Grand Total	1,671,494	100.0%	93,009	100.0%	1,578,485	100.0%

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Wildfire

Plumas County Planning Area

Parcels, Structures, and Values at Risk

By LRA Fire Hazard Severity Zone

By Jurisdiction

Jurisdiction / LRA Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
City of Portola							
Very High	1,488	891	$35,371,649	$139,031,606	$1,912,223	$88,048,386	$264,363,864
High	155	130	$2,578,722	$12,219,428	$2,849	$6,593,823	$21,394,822
Moderate	0	0	$0	$0	$0	$0	$0
Non-Wildland/Non-Urban	0	0	$0	$0	$0	$0	$0
Outside of Local Responsibility Area	0	0	$0	$0	$0	$0	$0
Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686
Unincorporated Plumas County							
Very High	2,212	1,775	$110,540,627	$345,315,982	$93,775,633	$219,780,962	$769,413,204
High	480	343	$29,466,872	$52,827,286	$2,723,330	$33,896,596	$118,914,084
Moderate	235	196	$7,886,778	$22,845,115	$137,783	$12,529,989	$43,399,665
Non-Wildland/Non-Urban	188	119	$15,785,356	$13,424,512	$1,611,613	$9,153,000	$39,974,481
Outside Local Responsibility Area	21,119	10,994	$1,501,315,095	$2,768,532,383	$43,279,204	$1,458,798,076	$5,771,924,758
Unincorporated Plumas Total	24,234	13,427	$1,664,994,728	$3,202,945,278	$141,527,563	$1,734,158,622	$6,743,626,191

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Wildfire

Portola

Parcels, Structures, and Values at Risk

By LRA Fire Hazard Severity Zone

by property use

LRA Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Personal Property Value	Estimated Contents Value	Total Value
Very High							
Agricultural	2	1	$536,231	$1,400,712	$0	$1,400,712	$3,337,655
Commercial	143	100	$7,452,926	$30,288,521	$1,481,391	$30,288,521	$69,511,359
Government	33	0	$0	$0	$0	$0	$0
Industrial	10	3	$325,236	$230,745	$0	$346,118	$902,099
Institutional	8	6	$178,938	$4,914,442	$147,200	$4,914,442	$10,155,022
Miscellaneous	2	0	$19	$0	$0	$0	$19
Recreational	1	0	$0	$0	$0	$0	$0
Residential	1,240	781	$26,878,299	$102,197,186	$283,632	$51,098,593	$180,457,710
ROW/Utilities	49	0	$0	$0	$0	$0	$0
Very High Total	1,488	891	$35,371,649	$139,031,606	$1,912,223	$88,048,386	$264,363,864
High							
Commercial	3	3	$130,371	$413,098	$2,849	$413,098	$959,416
Government	1	0	$0	$0	$0	$0	$0
Institutional	2	2	$45,960	$555,120	$0	$555,120	$1,156,200
Residential	149	125	$2,402,391	$11,251,210	$0	$5,625,605	$19,279,206
High Total	155	130	$2,578,722	$12,219,428	$2,849	$6,593,823	$21,394,822
City of Portola Total	1,643	1,021	$37,950,371	$151,251,034	$1,915,072	$94,642,209	$285,758,686

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Wildfire

Plumas County Planning Area

Populations at Risk

By Cal Fire LRA FHSZs and Jurisdiction *(Moderate or Higher)*

LRA Fire Hazard Severity Zone/Jurisdiction	Improved Residential Parcels	Population at Risk
Moderate		
City of Portola	0	0
Unincorporated County	184	440
High		
City of Portola	125	286
Unincorporated County	282	674
Very High		
City of Portola	781	1,788
Unincorporated County	1,494	3,571

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Capability Assessment

- Conduct an inventory of Communities' existing and proposed plans, policies, and programs that may affect its vulnerability to hazards.
- Determine the Communities' technical, administrative, and fiscal abilities to implement mitigation initiatives.
- Identify Educational and Outreach programs and activities.
- Evaluate the effectiveness of each for mitigation purposes. Note any gaps, shortfalls or conflicts associated with their design, enforcement of implementation.
- Identify opportunities to improve upon existing capabilities.

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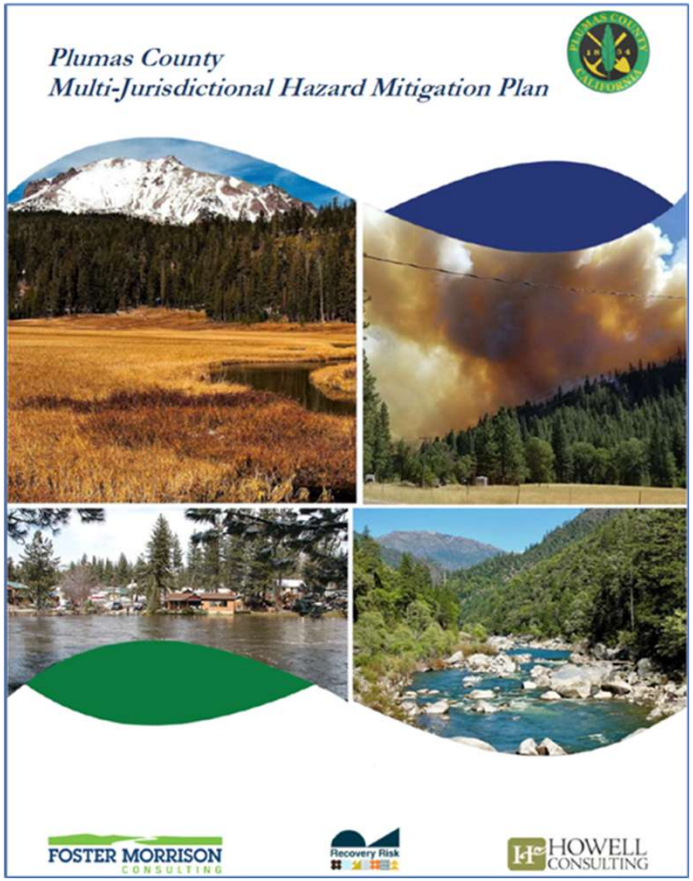
Phase III: Develop a Mitigation Plan

6) Set planning goals

7) Review mitigation alternatives

8) Draft a mitigation action plan



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6) Set Planning Goals – Using the risk assessment

- Goals are broad, long-term, policy type statements
- Goals provide guidelines for reducing or avoiding potential losses from identified priority hazards.
- Based on the Risk Assessment identify areas of extreme vulnerability
  - At-risk populations, structures, critical facilities, infrastructure, and other assets
  - Future development/redevelopment areas
- Consider goals from other planning mechanisms
- Identify other mitigation opportunities
  - Repetitive losses
  - Public education
  - Improve existing capabilities

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7) Review Mitigation Action Alternatives

- Mitigation actions are the specific projects, measures, and activities that help achieve plan goals and reduce the impacts of identified hazards
- Categories of Mitigation Measures:
  - Prevention
  - Property protection
  - Structural projects
  - Natural resource protection
  - Emergency services
  - Public Education
  - Multi-hazard measures and considerations
  - No action

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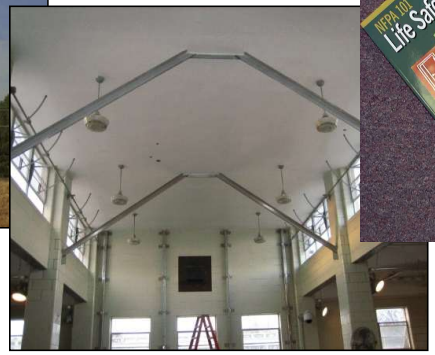
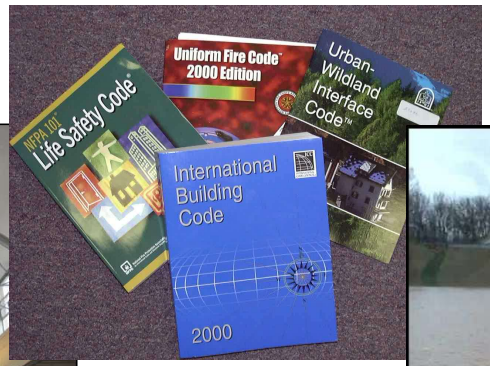
Hazard Mitigation Strategies





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Review of Mitigation Alternatives – Criteria for Selecting Mitigation Measures

- Will it work?
- Is it cost-beneficial?
- Is it affordable?
- Is it legal?
- Is it fair?
- Do people want it?
- Is funding available?
- Are there administrative burdens?
- Is it politically acceptable to community leaders?
- Is it environmentally sound?

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Thank you!

Plumas County

Local Hazard Mitigation Plan Update




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