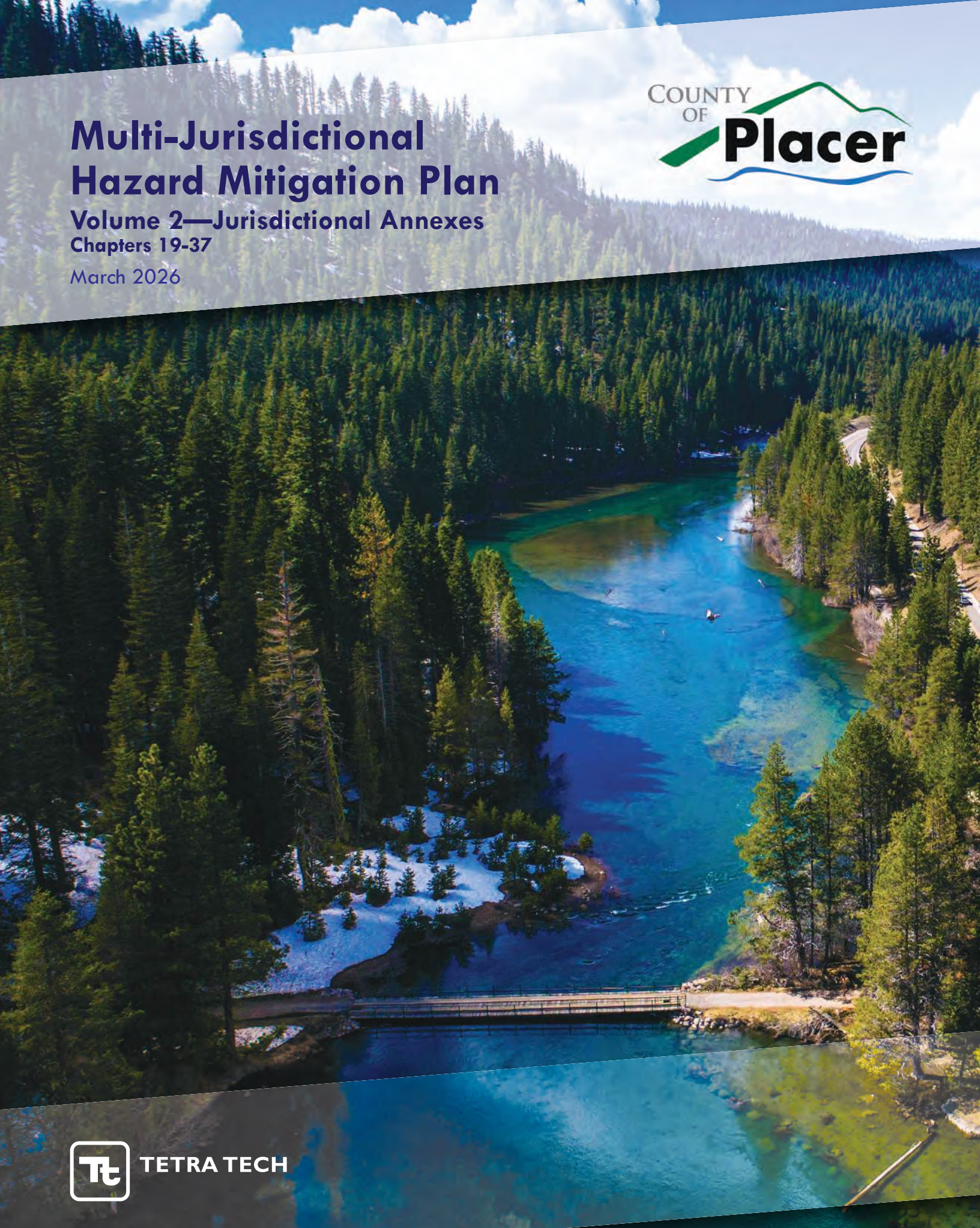
Multi-Jurisdictional Hazard Mitigation Plan

Volume 2—Jurisdictional Annexes

Chapters 19-37

March 2026



COUNTY OF Placer

TETRA TECH

Placer County Multi-Jurisdictional Hazard Mitigation Plan

March 2026

#105S052516

PREPARED FOR

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19. Newcastle Fire Protection District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in Newcastle Fire Protection District (Newcastle FPD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Newcastle FPD, describes who participated in the planning process, assesses Newcastle FPD ‘s risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Newcastle FPD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

19.1 Hazard Mitigation Planning Team

Newcastle FPD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Mark D’Ambrogi, Assistant Chief

Address: P.O. Box 350 Meadow Vista, CA 95722

Phone Number: 530-878-0405 ext. 205

Email: dambrogi@placerhillsfire.org

Alternate Point of Contact: John Williamson, Battalion Chief

Address: P.O. Box 350 Meadow Vista, CA 95722

Phone Number: 530-878-0405

Email: jwilliamson@placerhillsfire.org

The Assistant Chief represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder

outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 19-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 19-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Mark D'Ambrogi	Newcastle FPD	Assistant Chief	Primary point of contact for all planning activities
John Williamson	Newcastle FPD	Battalion Chief	Secondary point of contact for all planning activities
Michelle Armstrong	Newcastle FPD	District Manager	Supported worksheet completion and draft document review
Rhia Fairchild	Newcastle FPD	Administrative Assistant	Supported worksheet completion and draft document review
Ian Gow	Newcastle FPD	Fire Chief	Review draft documents and provide feedback

19.2 Community Profile

Newcastle FPD is located in the Sierra Foothills of Placer County, California. The District was established in 1868 and is in a new fire station since 2023, the first fire station for the Newcastle FPD. The District covers 15 square miles, serves approximately 6200 residents, and responds to approximately 700 calls for service annually.

The District is governed by a five member Board of Directors which is elected by voters of the District. The Fire Chief (currently shared with Placer Hills FPD) oversees 6 full time employees and 3-4 active volunteer firefighters.

The Newcastle FPD cross staffs both a Type 1 and Type 3 Wildland Interface Engine with a minimum staffing of two Personnel. Both personnel are trained to a minimum of EMT-1 with advanced scope of skills. One captain and one engineer are minimum staffing with intern, seasonal and volunteer personnel augmenting staffing to provide three personnel when possible. The District is an "AllRisk" department that provides a timely response to all types of fires, medical emergencies, rescues, and hazardous material incidents. Additional services include a year-round fire prevention program incorporating building occupancy inspections, new building plan reviews and an aggressive risk reduction and Public Education delivery model.

The District currently has two benefit assessments levied of which bring in $340,358 and $167,493 annually to help fund the District. In 2023 a new fire station was built for the Newcastle FPD, station 41. Part of the benefit assessments are for the cost of the new fire station.

Currently the Newcastle FPD has an agreement with Placer Hills FPD for Administrative Services that include: A Fire Chief, District Manager, Fire Marshal services, and Battalion Chief coverage.

19.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Newcastle FPD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

19.3.1 Outreach Activities

Newcastle FPD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District made printed MJHMP materials available in the lobby of Fire Station 41. In addition, the District posted information about the MJHMP, hazard mitigation public survey, and Hazard Mitigation Planning Committee meetings on their website. Finally, the District maintains a standing MJHMP agenda item at its monthly Board meetings, providing the public an opportunity to attend and engage. This forum also enables staff to deliver status updates on the MJHMP process to the District's elected officials. The District's outreach efforts are shown in Figure 19-1 through Figure 19-3.

19.3.2 Public Feedback Integration

Public input was collected at the monthly Board meetings where status of the planning process was provided and public comment was taken from those in attendance. The most common concerns expressed were regarding wildfire and the Fire Districts' capabilities to respond to such events. In addition, evacuation concerns were expressed in specific areas of the District and who is responsible for evacuation planning.

These insights were used to adjust the hazard rankings in the plan, ensuring that the final rankings reflected not only technical data but also the lived experiences and concerns of the community.

Figure 19-1. Virtual Public Outreach Activities

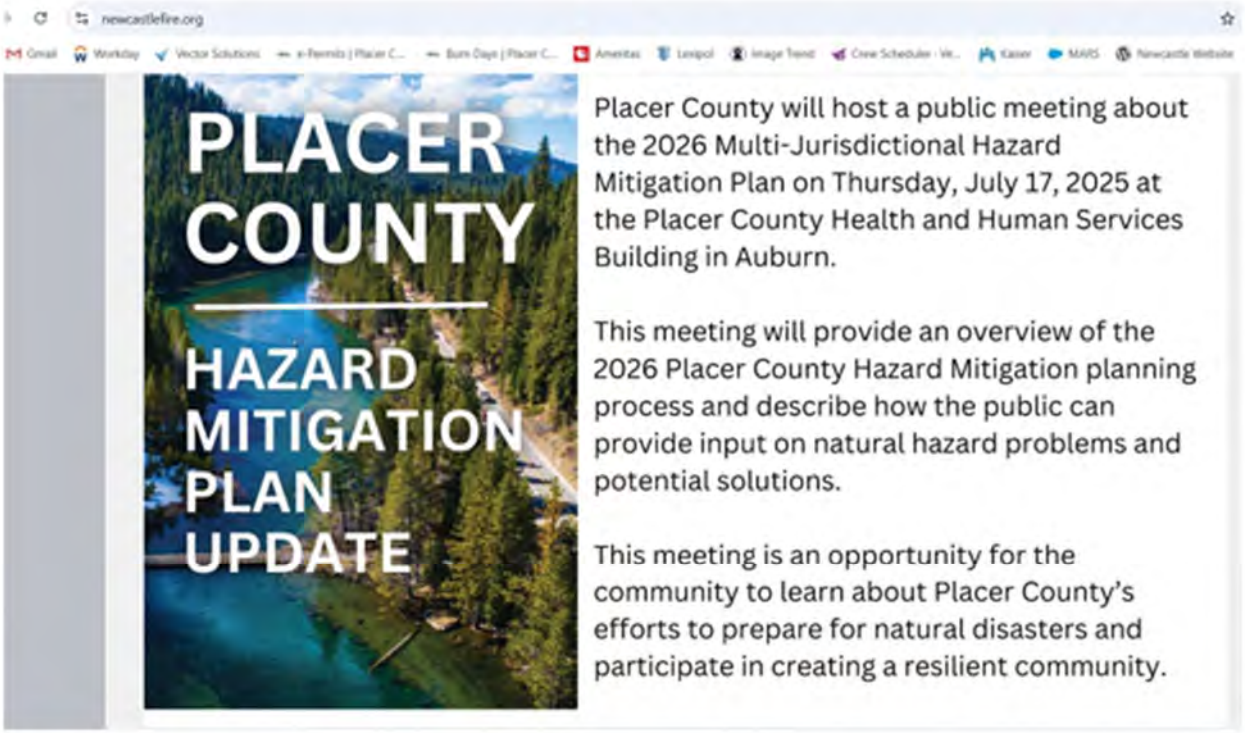
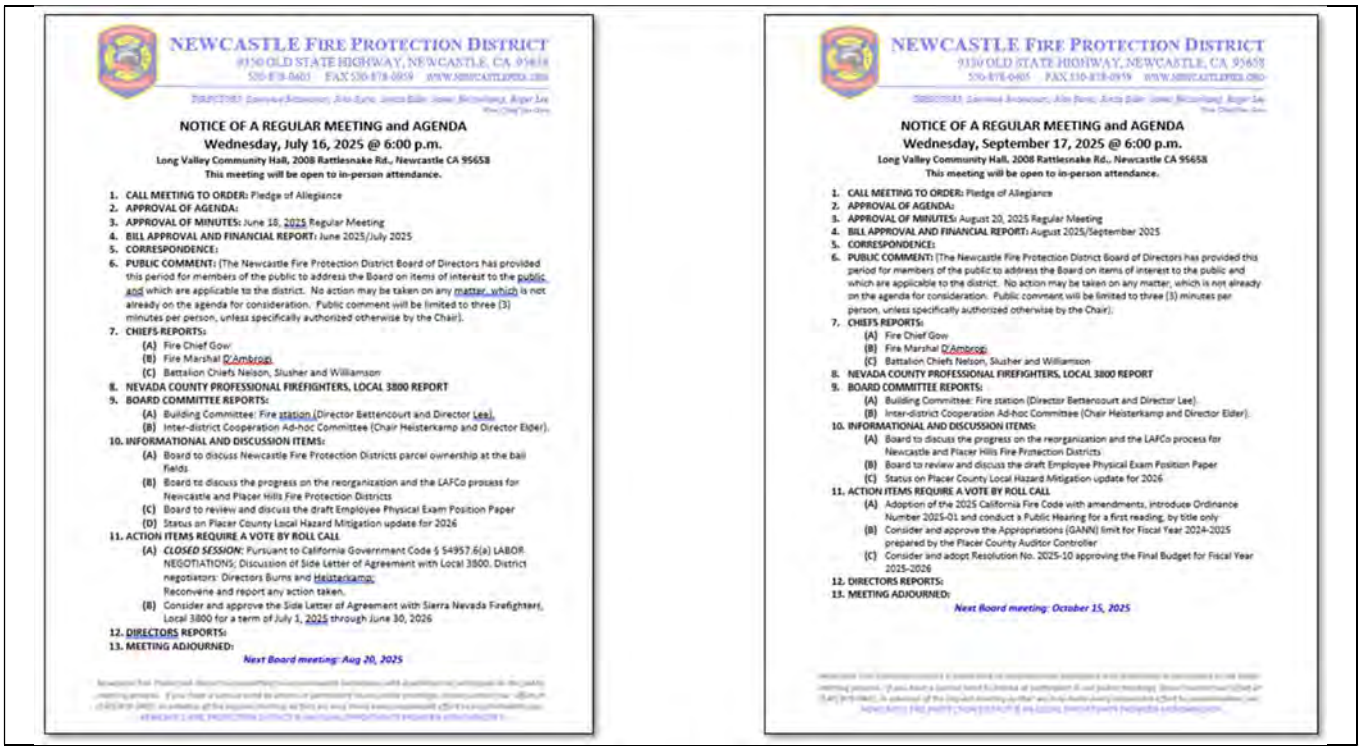


Figure 19-2. Printed Outreach Materials – Lobby, Fire Station 41

Figure 19-3. Public Board of Directors Meetings, July and September 2025



NEWCASTLE FIRE PROTECTION DISTRICT
9150 OLD STATE HIGHWAY, NEWCASTLE, CA 95658
530-878-0405 FAX 530-878-0959 WWW.NEWCASTLEFPD.ORG

NOTICE OF A REGULAR MEETING and AGENDA
Wednesday, July 16, 2025 @ 6:00 p.m.
Long Valley Community Hall, 2008 Rattlesnake Rd., Newcastle CA 95658
This meeting will be open to in-person attendance.

1. CALL MEETING TO ORDER: Pledge of Allegiance
2. APPROVAL OF AGENDA:
3. APPROVAL OF MINUTES: June 18, 2025 Regular Meeting
4. BILL APPROVAL AND FINANCIAL REPORT: June 2025/July 2025
5. CORRESPONDENCE:
6. PUBLIC COMMENT: (The Newcastle Fire Protection District Board of Directors has provided this period for members of the public to address the Board on items of interest to the public and which are applicable to the district. No action may be taken on any matter, which is not already on the agenda for consideration. Public comment will be limited to three (3) minutes per person, unless specifically authorized otherwise by the Chair).
7. CHIEFS REPORTS:
   (A) Fire Chief Gow
   (B) Fire Marshal D'Ambrogi
   (C) Battalion Chiefs Nelson, Slusher and Williamson
8. NEVADA COUNTY PROFESSIONAL FIREFIGHTERS, LOCAL 3800 REPORT
9. BOARD COMMITTEE REPORTS:
   (A) Building Committee: Fire station (Director Bettencourt and Director Lee).
   (B) Inter-district Cooperation Ad-hoc Committee (Chair Heisterkamp and Director Elder).
10. INFORMATIONAL AND DISCUSSION ITEMS:
   (A) Board to discuss Newcastle Fire Protection Districts parcel ownership at the ball fields
   (B) Board to discuss the progress on the reorganization and the LAFCo process for Newcastle and Placer Hills Fire Protection Districts
   (C) Board to review and discuss the draft Employee Physical Exam Position Paper
   (D) Status on Placer County Local Hazard Mitigation update for 2026
11. ACTION ITEMS REQUIRE A VOTE BY ROLL CALL
   (A) *CLOSED SESSION:* Pursuant to California Government Code § 54957.6(a) LABOR NEGOTIATIONS; Discussion of Side Letter of Agreement with Local 3800. District negotiators: Directors Burns and Heisterkamp:
   Reconvene and report any action taken.
   (B) Consider and approve the Side Letter of Agreement with Sierra Nevada Firefighters, Local 3800 for a term of July 1, 2025 through June 30, 2026
12. DIRECTORS REPORTS:
13. MEETING ADJOURNED:

Next Board meeting: Aug 20, 2025

NEWCASTLE FIRE PROTECTION DISTRICT
9150 OLD STATE HIGHWAY, NEWCASTLE, CA 95658
530-878-0405 FAX 530-878-0959 WWW.NEWCASTLEFPD.ORG

NOTICE OF A REGULAR MEETING and AGENDA
Wednesday, September 17, 2025 @ 6:00 p.m.
Long Valley Community Hall, 2008 Rattlesnake Rd., Newcastle CA 95658
This meeting will be open to in-person attendance.

1. CALL MEETING TO ORDER: Pledge of Allegiance
2. APPROVAL OF AGENDA:
3. APPROVAL OF MINUTES: August 20, 2025 Regular Meeting
4. BILL APPROVAL AND FINANCIAL REPORT: August 2025/September 2025
5. CORRESPONDENCE:
6. PUBLIC COMMENT: (The Newcastle Fire Protection District Board of Directors has provided this period for members of the public to address the Board on items of interest to the public and which are applicable to the district. No action may be taken on any matter, which is not already on the agenda for consideration. Public comment will be limited to three (3) minutes per person, unless specifically authorized otherwise by the Chair).
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   (A) Board to discuss the progress on the reorganization and the LAFCo process for Newcastle and Placer Hills Fire Protection Districts
   (B) Board to review and discuss the draft Employee Physical Exam Position Paper
   (C) Status on Placer County Local Hazard Mitigation update for 2026
11. ACTION ITEMS REQUIRE A VOTE BY ROLL CALL
   (A) Adoption of the 2025 California Fire Code with amendments, introduce Ordinance Number 2025-01 and conduct a Public Hearing for a first reading, by title only
   (B) Consider and approve the Appropriations (GANN) limit for Fiscal Year 2024-2025 prepared by the Placer County Auditor Controller
   (C) Consider and adopt Resolution No. 2025-10 approving the Final Budget for Fiscal Year 2025-2026
12. DIRECTORS REPORTS:
13. MEETING ADJOURNED:

Next Board meeting: October 15, 2025

19.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

19.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County. In addition, all these agencies work collectively during large incidents.

- CAL FIRE
- Placer County Office of Emergency Services
- Placer County Sheriff's Office

19.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. The District actively works with the Placer County Planning and Building Departments on a consistent basis.

- Placer County Building Department
- Placer County Community Development Resource Agency & Planning Services

19.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District.

- City of Auburn
- Penryn FPD
- Placer County
- Placer Hills FPD
- South Placer FPD

19.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District. The Fire District works with the local water providers to ensure services during emergencies. The School District works with the Fire District to coordinate emergency plans.

- Newcastle Union School District
- Placer County Water Agency

19.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District.

- Newcastle Community Association
- Greate Auburn Area Fire Safe Council
- United Auburn Indian Community

19.5 Jurisdictional Capability Assessment

Newcastle FPD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Newcastle FPD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Newcastle FPD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the District or municipality where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore,

assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

19.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 19-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 19-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Fire Code **Title 24, Part 9** **January 1, 2026**	The California Fire Code is a comprehensive set of state regulations based on the International Fire Code (IFC) that establishes standards for life and property safety from fire and explosion hazards. It covers areas such as the storage and handling of hazardous materials, building construction, fire suppression systems, and conditions hazardous to life and property.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

19.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried its existing plans against the full capability list of hazard mitigation-related capabilities. Table 19-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 19-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Capital Improvement Plan or Program	Aligned with MJHMP to ensure that infrastructure projects reduce community vulnerabilities and enhance resilience against identified hazards	Collaborate with Placer County on zoning, WUI, seismic, Flood zone, and other related development standards when expanding existing facilities and or building new facilities such as fire stations and training centers.	Board of Directors/ Administration
Community Wildfire Protection Plan	This project addresses wildfire hazard within Placer County. It contains mitigation actions and a mitigation strategy to reduce wildfire risk. The CWPP is integrated with the 2021 MJHMP.	The fire district collaborates with Placer OES on the CWPP	Placer County Office of Emergency Services
Other Community Plan	The fire district participates and supports FIREWISE communities throughout the district	The fire district plans to expand participation in FIREWISE communities and strengthen wildfire prevention efforts.	Placer County Office of Emergency Services
Emergency Operations Plan	The fire district is integrated in the EOP through the Fire Representative in the EOP.	The fire district will enhance its role in the EOP by increasing coordination and training opportunities.	Placer County Office of Emergency Services

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

19.5.3 Development and Permitting Capability

Newcastle FPD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

19.5.4 Administrative Capability

Table 19-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 19-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Newcastle FPD Board of Directors	The Board can endorse hazard mitigation projects.
Emergency Management/Public Safety Department	Fire and medical response
Mutual aid agreements	As per Western Placer County Fire Chiefs Association

Capability	Description, Expansion, Improvement
Human Resources Manual ***e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?***	Emergency fire and medical response as part of the job descriptions

19.5.5 Technical Capability

Table 19-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 19-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Emergency Manager	Fire Chief acts as the emergency manager
Other (this could include stormwater engineer, environmental specialist, etc.)	Fire Code inspectors and enforcement

19.5.6 Fiscal Capabilities

Table 19-6 summarizes financial resources available to Newcastle FPD.

Table 19-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Authority to levy taxes for specific purposes	Special tax assessments levied on properties throughout the fire district as additional source of funding
Impact fees for homebuyers or developers of new development/homes	Mitigation impact fees collected to offset capital assets on new development for emergency response
Incur debt through special tax bonds	The fire district has the ability to secure funding for capital projects through special tax bonds

19.5.7 Education and Outreach Capability

Table 19-7 summarizes the education and outreach resources available to Newcastle FPD.

Table 19-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Typically, through the Fire Prevention/Administration For large scale incidents, the Placer County PIO is used and collaborates with the Fire District PIO
Hazard mitigation information available on your website	General fire prevention materials, programs, requirements, and information is provided to the public
Natural disaster/safety programs in place for schools	Fire Prevention programs delivered in schools includes wildfire issues
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Through NGO's, presentations are requested at various events that focus on hazards, risks, and prevention

19.5.8 Community Classifications

Table 19-8 summarizes classifications for community programs available to Newcastle FPD.

Table 19-8. Community Classifications

Program	Participating?	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4/4Y	2021
Firewise Communities classification	Yes	Various in district	ongoing
CAL FIRE Risk Reduction Community List	Yes	(Placer County)	2024

19.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 19-9 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 19-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Moderate - Resources have some capabilities for flood events along with training
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak

Hazard	Adaptive Capacity
Wildfire	Strong

19.6 National Flood Insurance Program

Newcastle Fire Protection is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

19.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Newcastle FPD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

19.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 19-4 through Figure 19-8. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Newcastle FPD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 19-4. Dam Inundation Hazard Area

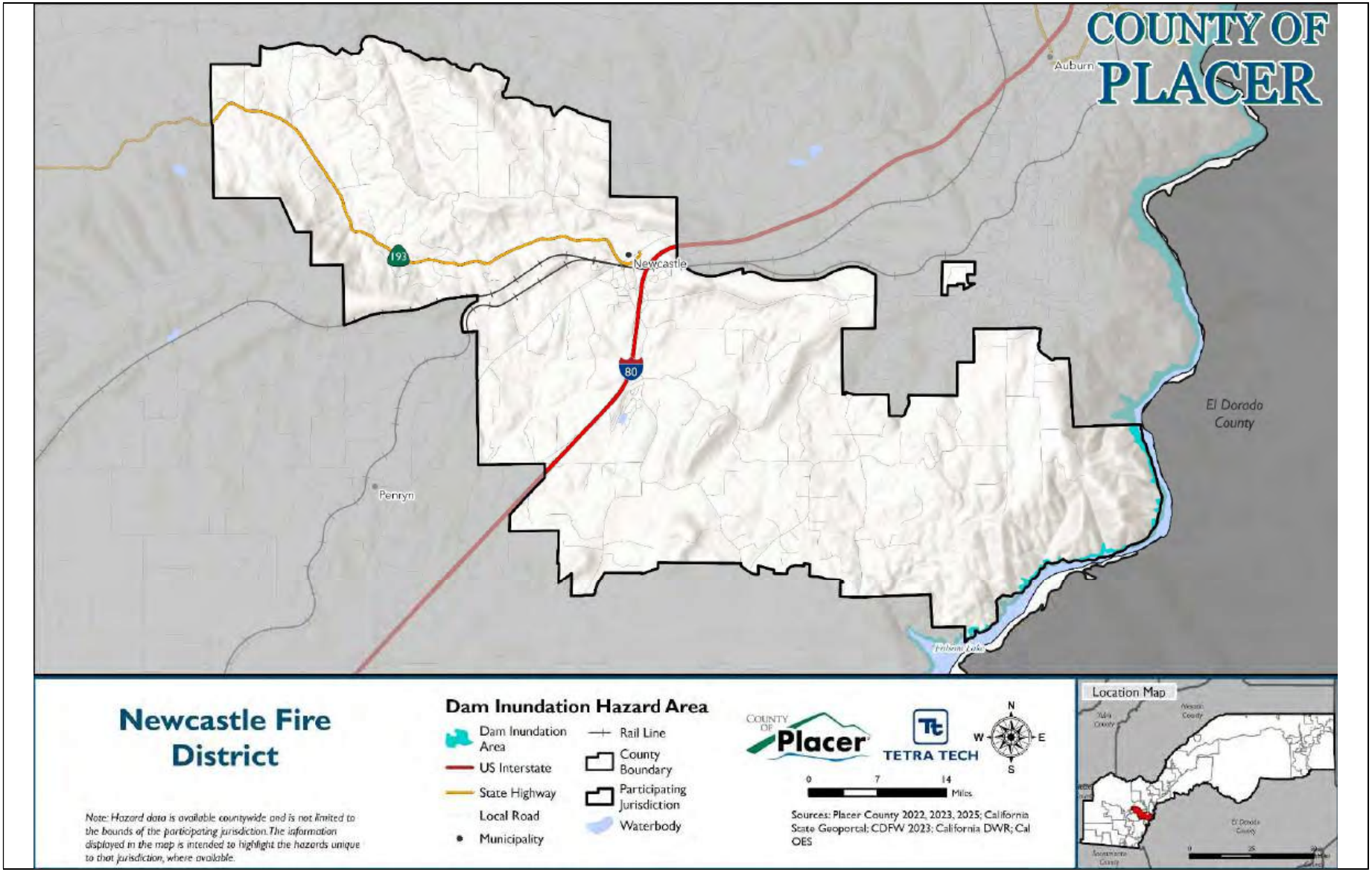


Figure 19-5. Flood Hazard Area

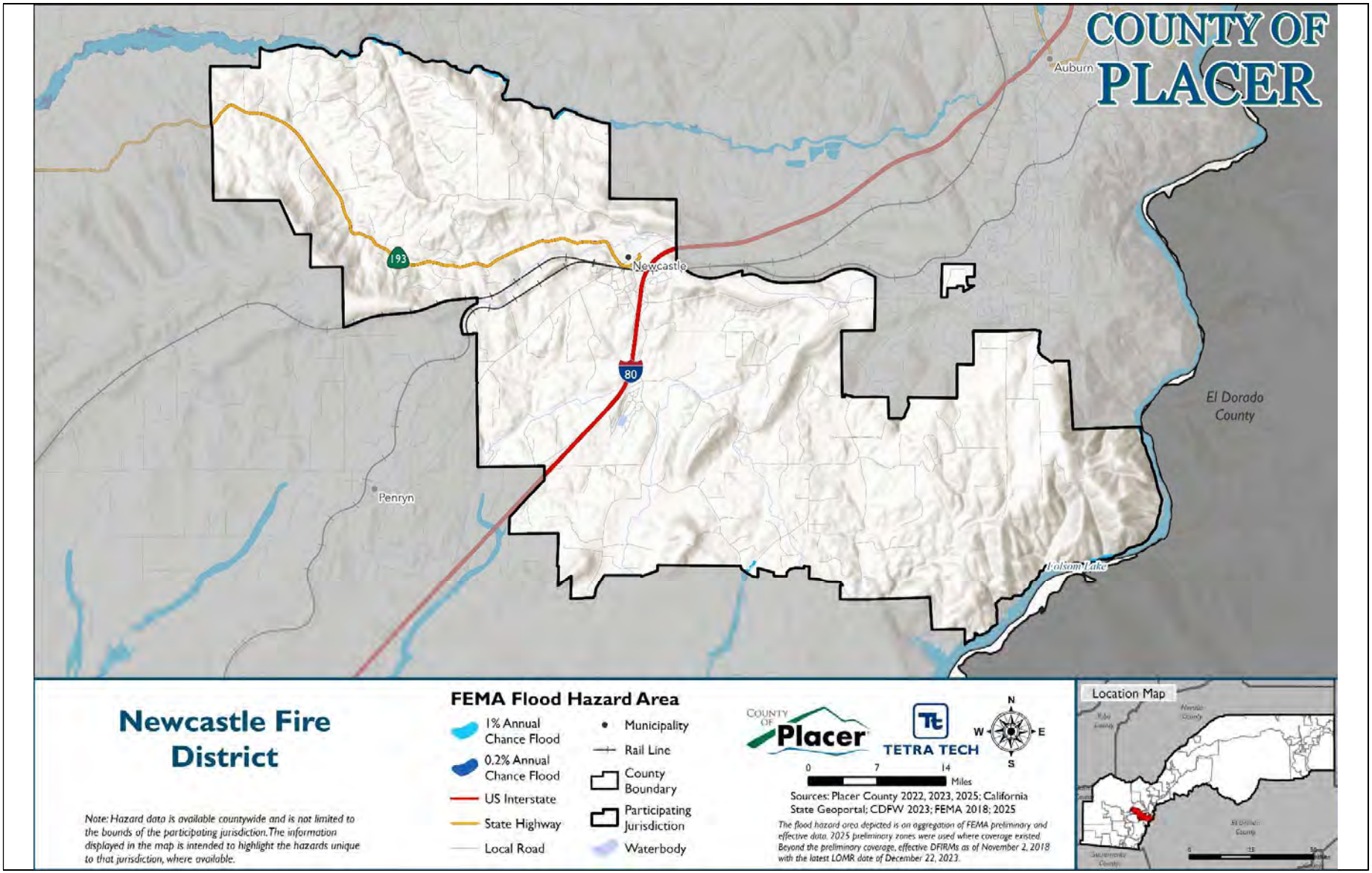


Figure 19-6. Landslide Hazard Area

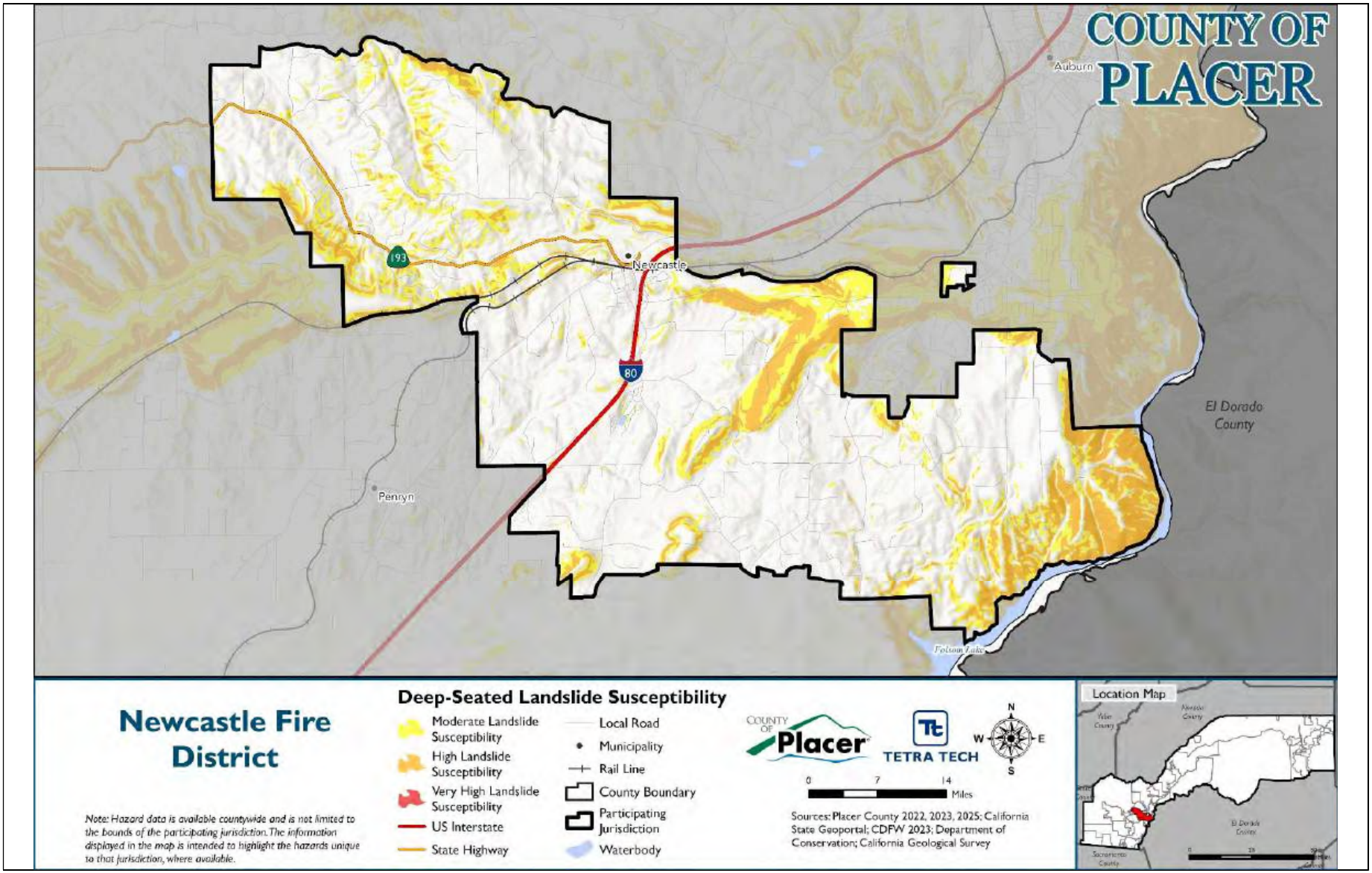


Figure 19-7. NEHRP Soil Class D Hazard Area

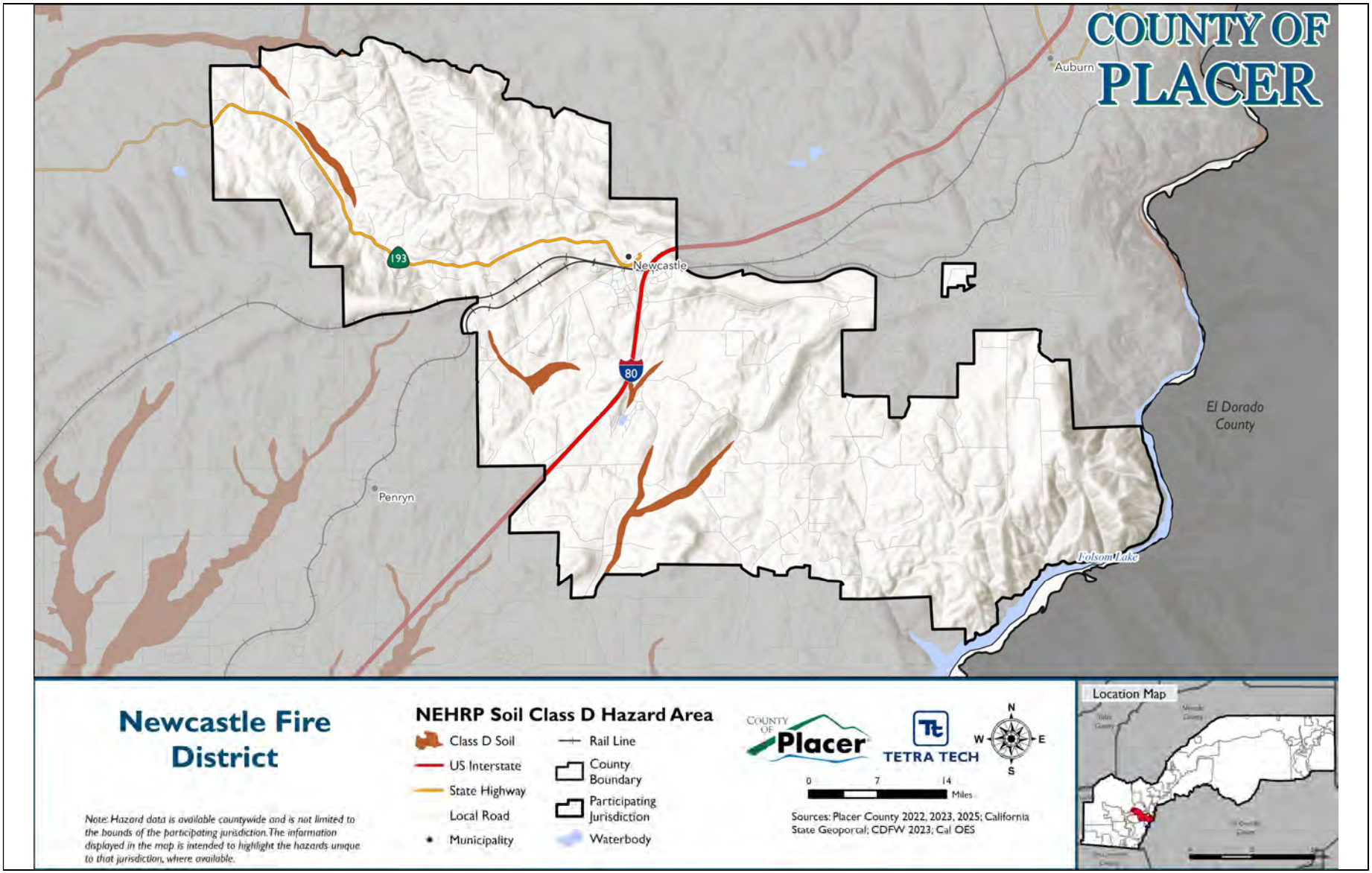
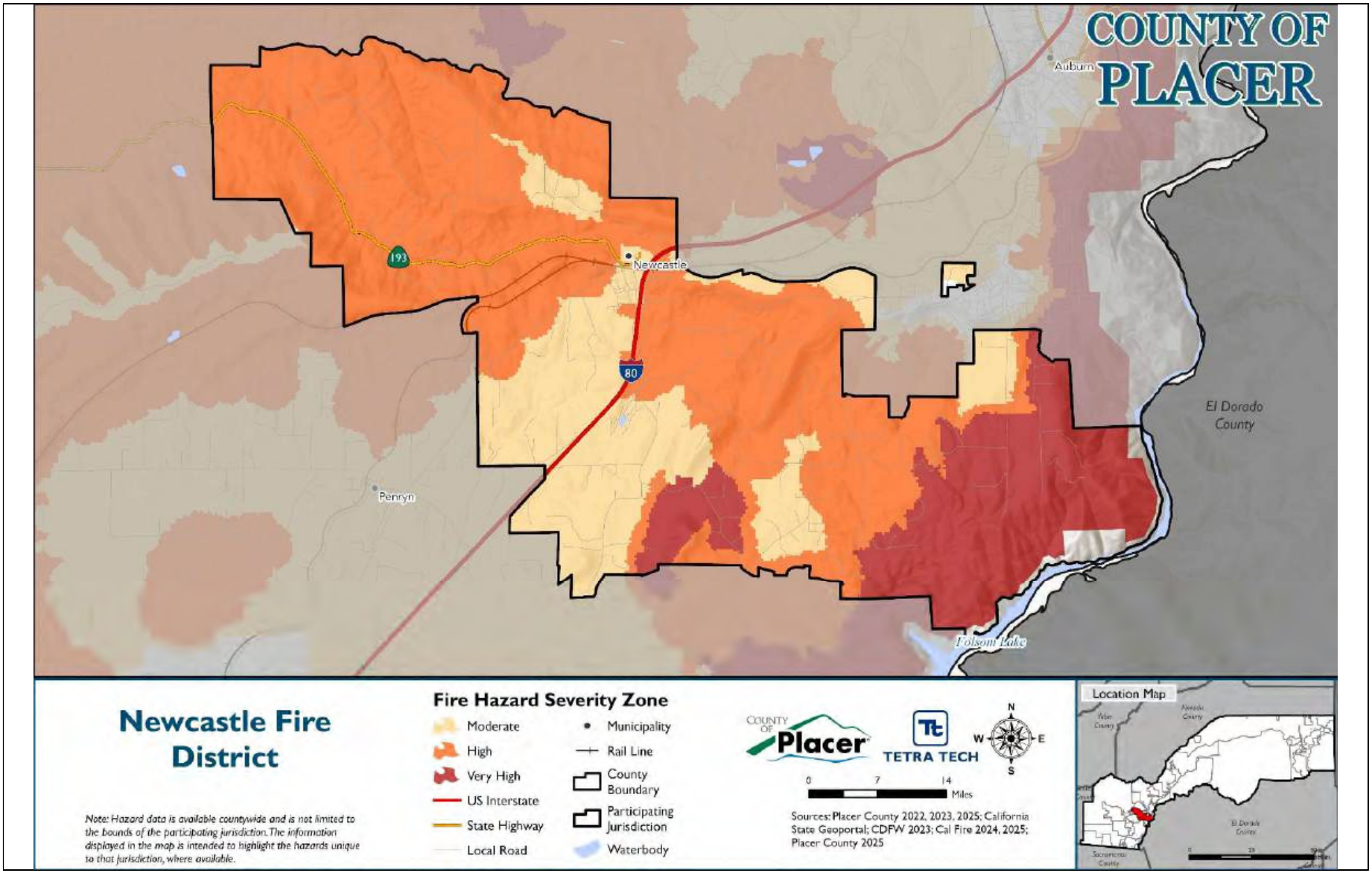


Figure 19-8. Wildfire Hazard Area



19.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 19-10 provides details on loss and damage in Newcastle FPD during hazard events since the last hazard mitigation plan update.

Table 19-10. Hazard Event History in Newcastle FPD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
September 7, 2022	September 30, 2022	Wildfire	The Mosquito Fire began in Placer County 4 miles east of Foresthill near Mosquito Ridge Road, CA, and close to Oxbow Reservoir the evening of September 6, 2022, at 6:27 PM PDT and later spread into El Dorado County. Extreme fire behavior was observed due to the very dry humidity and fuels, with the fire developing large plumes that radar indicated extended up to 40,000 feet. In the first few days, the fire saw rapid growth at 5,705 acres by 7 pm PDT on the 7th and 13,705 acres by 8 pm PDT on the 8th. More than 11,000 people were evacuated and 9,000 structures were threatened. The fire included areas in both the Tahoe and Eldorado National Forests. The fire burned a total of 76,788 acres and caused road closures throughout the area. There were 2 firefighters injured during the fire. A total of 78 structures were destroyed and an additional 13 buildings were damaged in the towns of Foresthill, Volcanoville, and Michigan Bar. Periods of moderate to heavy rain from September 18-21 largely halted fire growth, but the fire was not considered fully contained until October 22.	Newcastle Fire District sent a Type 3 Fire Engine staffed with 3 people to assist on fire – Cal OES- Strike Team - Overtime
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Localized flooding and power outages. Increase in call volume

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	OES- Preposition (Mud / Debris) CA-OES-230013-XPL extra staffing O-20230582-NEW Newcastle Fire District up staffed an extra engine and staffed it with 3 people for the event. The engine and staffing were available to be used in OES Region IV. Overtime Localized flooding of streets and power outages
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	OES- Preposition (Mud / Debris) CA-OES-230036-XPL extra staffing O-20230127-NEW Newcastle Fire District up staffed an extra engine and staffed it with 3 people for the event. The engine and staffing were available to be used in OES Region IV. Overtime Localized flooding of streets and power outages
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	Local street flooding and power outages – High Winds Increase in call volume

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
March 4, 2023	March 7, 2023	Winter Weather	A powerful, cold storm system with heavy snow and gusty winds sometimes brought dangerous driving with whiteout conditions. Snow amounts of 3 to 5 feet were reported in the mountains. Heavy snow fell down into the foothills impacting travel. Numerous schools were closed or had delays due to the snow. Gusty winds of 40-50 mph were recorded across the area, with gusts locally higher in the high elevations of the northern Sierra. The winds and low snow combined to cause dangerous travel conditions with an extended closure of Interstate 80. Accumulating snow fell into the Motherlode foothills. CoCoRaHS snowfall reports included 3.0 inches at Grass Valley 2.7 SW, and 2.5 inches at Sonora 3.4E, 3.5 inches at Volcano 3.2N and 5.8 inches of snow at Camino 1.2 N. Schools and businesses were reported closed. Numerous power outages were reported, including continued outages from previous storms. Several storage units collapsed in Grass Valley due to heavy snow load. No injuries reported.	Local street flooding, High winds and street flooding. Power lines down. Increase in call volume

19.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Newcastle FPD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 19-11 shows Newcastle FPD ‘s final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

19.7.4 Vulnerability Assessment

Table 19-12 lists issues related to the top hazards of concern for Newcastle FPD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 19-11. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

Table 19-12. Hazard Issues

Issue	Related Hazard
Reduce potential destruction from wildfire. Educate homeowners on steps they can take to protect their property, create a resilient landscape to protect them from wildfire	Wildfire
Inadequate access for emergency responders. Through inspection and education, residents can mitigate access issues to ensure access for evacuation and response for emergency resources	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Keep informed of potential weather and related events at all time. Be prepared to collaborate with other agencies and activate response plans, have everyone know their roles in a potential emergency	Wildfire, Heavy Rains and Storms, Flood, High Wind and Tornadoes, Freeze and Snow
Identify areas within the fire district where mitigation measures may be implemented to reduce the destruction of wildlife.	Wildfire
Collaboration with other agencies and organizations to develop response plans, public information, sources of information, and information sharing. Create an environment where all organizations are working together.	Wildfire
Adopt specific amendments to the CA Fire Code that can assist in mitigating natural disasters within the fire district to reduce damage.	Wildfire
Difficulty in locating structures when no address signage is in place. Using a standard addressing system may assist all emergency responders and aid in response and evacuation.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Create the highest level of medical services in the field for any type of emergency. This additional level of service will not only enhance day-to-day medical emergencies, but becomes crucial in large scale disasters.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire

19.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 19-13 describes the potential impacts of the hazards of local concern on Newcastle FPD (hazards identified as medium or high risk in Table 19-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 19-13. Hazard Impacts

Hazard	Potential Impacts
Wildfire	The District is almost entirely located within a Very High, High or Moderate Fire Hazard Severity Zones, creating a significant risk of wildfire that could damage facilities, equipment, and threaten personnel despite existing mitigation practices. Fire Station 41, which also houses fire apparatus and equipment, could potentially be at risk from wildfire.

19.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect Newcastle FPD's overall vulnerability since the previous plan was approved.

19.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

19.8.1 Changes in Community Priorities

The District's priorities have shifted toward a more comprehensive approach to community safety and emergency preparedness. Current efforts emphasize proactive wildfire risk reduction, improved emergency access, and enhanced situational awareness during severe weather events. Strengthening partnerships with local organizations and aligning with state safety standards are key components of this strategy. Additionally, the District is focused on improving property identification for faster response times and expanding advanced medical capabilities to better serve residents during emergencies. These priorities reflect a commitment to resilience, collaboration, and the protection of life and property.

19.8.2 Past Mitigation Action Status

Table 19-14 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 19-14. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy ?	IF NO, explain why no longer relevant
1	Through inspection, identify those areas needing fuel reduction along private roadways and driveways. Optimal clearance is 10 feet from each shoulder and 15 vertical clearance. Inform property owners of the importance and their responsibility to create and maintain these accesses for emergency response and civilian evacuation. Implement the formal process of "Notice to Abate" as needed.	Private roadway and driveway vegetation clearances.	Complete	Yes	
2	Apply Placer County standard for addressing for all new construction throughout the fire district. Identify structures needing appropriate addressing and inform and educate property owners of a standard and consistent addressing means.	Address signage for residential and commercial structures.	Complete	Yes	
3	Provide daily paramedic staffing on the engine company at all times; 24/7. Procure, maintain, and manage personnel certification and equipment related to ALS.	Provide Advanced Life Support (ALS) services utilizing paramedics on the engine company.	Not Complete	Yes	Awaiting LAFCO approval for reorganizatio n with Placer Hills FPD
4	Through an inspection process, educate, inform, and make recommendation for property owners on what actions to take to reduce the risk of destruction from wildfire. Identify vegetation to remove, reduce, and maintain to achieve defensible space. Identify potential areas of home hardening to better prepare for wildfire. Conduct inspections on private properties to identify specific needs of that property to achieve defensible space.	Defensible space inspection and implementation throughout the District.	Complete	Yes	
5	Provide a new fire facility capable of supporting emergency response personnel with 24/7 operations, housing emergency response vehicles and equipment, and provide public access for conducting routine business associated with the fire district.	Relocate and construct a new fire station for the Newcastle FPD.	Complete	No	New fire station completed in November of 2022
6	The Newcastle FPD participates in the GAAFSC. Continued participation and collaboration will occur on an on-going basis. Attending monthly meetings and participate in GAAFSC events.	Participate and collaborate with the Greater Auburn Area Fire Safe Council (GAAFSC) and contribute to the Community Wildfire Protection Plan (CWPP)	Complete	Yes	
7	Obtain the most up-to-date information regarding adverse weather, predicted weather events, and related weather that may impact District response to emergencies.	Heavy Rains, Localized Flooding, Flood, Freeze, and Snow Mitigation	Complete	Yes	

Note: The District stated all projects are ongoing and incorporated into district programs, except new fire station.

19.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, Newcastle FPD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- A new fire station was completed in 2023, that includes generator power and fueling services.
- Several communities have achieved FIREWISE status with collaboration from the Greater Auburn Area Fire Safe Council and the NFPD
- The NFPD and PHFPD FF Associations provide address signage at a small cost to citizens of both Districts. In 2022 a grant was obtained for a period of two years to provide address signage at no cost to citizens.

19.8.4 Hazards Omitted from Mitigation Strategy

Newcastle FPD did not include a mitigation action for avalanche because it is located entirely outside of the avalanche hazard area.

19.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Newcastle FPD would like to pursue in the future to reduce the risk from hazards.

Table 19-15 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 19-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	X	-	-	X
Drought and Water Shortage	X	-	-	X
Earthquake	X	-	-	X
Flood	X	-	-	X
Freeze and Snow	X	-	-	X
Heavy Rains and Storms	X	-	-	X
High Winds and Tornadoes	X	-	-	X
Landslides, Mudslides, and Debris Flows	X	-	-	X
Wildfire	X	-	-	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 19-16 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 19-16. Mitigation Strategy Prioritization

New Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
NFPD-01	Defensible Space Inspections	4	1-5 Years	High	Low	9	High
NFPD-02	Access for Emergency Response	3	1-5 years	High	Low	8.75	High
NFPD-03	Monitor Weather Events	1	1-5 Years	High	Low	8.25	High
NFPD-04	Community Wildfire Protection Plan	1	1-5 Years	High	Low	8.25	High
NFPD-05	Fire Safe Council Collaboration	5	1-5 Years	Low	Low	7.25	Medium
NFPD-06	CA Fire Code Adoption	1	1-5 Years	Medium	Low	7.25	Medium
NFPD-07	Address Signage	3	1-5 years	Low	Low	6.75	Medium
NFPD-08	Provide Advanced Life Support	1	1-5 Years	High	High	6.25	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

19.8.6 Mitigation Strategy

Table 19-17 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 19-17. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
NFPD-01	Defensible Space Inspections	Through an inspection process, educate, inform, and make recommendation for property owners on what actions to take to reduce the risk of destruction from wildfire. Identify vegetation to remove, reduce, and maintain to achieve defensible space. Identify potential areas of home hardening to better prepare for wildfire. Conduct inspections on private properties to identify specific needs of that property to achieve defensible space.	Wildfire	Newcastle FPD Fire Prevention	Newcastle FPD Administration	Staff time through general fund
NFPD-02	Access for Emergency Response	Through inspection, identify those areas needing fuel reduction along private roadways and driveways. Optimal clearance is 10 feet from each shoulder and 15 vertical clearance. Inform property owners of the importance and their responsibility to create and maintain these accesses for emergency response and civilian evacuation. Implement the formal process of “Notice to Abate” as needed.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Newcastle FPD Fire Prevention	Newcastle FPD Administration	Staff time through general fund
NFPD-03	Monitor Weather Events	Obtain the most up-to-date information regarding adverse weather, predicted weather events, and related weather that may impact District response to emergencies.	Wildfire, Heavy Rains and Storms, Flood, High Wind and Tornadoes, Freeze and Snow	Newcastle FPD Operations	Newcastle FPD Administration	Staff time through general fund
NFPD-04	Community Wildfire Protection Plan	Actively participate in the development and update of the Community Wildfire Protection Plan (CWPP) and implement the action items identified in the plan.	Wildfire	Newcastle FPD Fire Prevention	Newcastle FPD Administration	Staff time through general fund
NFPD-05	Fire Safe Council Collaboration	The Newcastle FPD participates in the Greater Auburn Area Fire Safe Council (GAAFSC). Continued participation and collaboration will occur on an on-going basis. Attending monthly meetings and participate in GAAFSC events.	Wildfire	Newcastle FPD Fire Prevention	Newcastle FPD Administration	Staff time through general fund

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
NFPD-06	CA Fire Code Adoption	Continue on the three year cycle of adopting the CA Fire Code with amendments to address natural hazards specific to the fire district.	Wildfire	Newcastle FPD Fire Prevention	Newcastle FPD Administration	Staff time through general fund
NFPD-07	Address Signage	Apply Placer County standard for addressing for all buildings throughout the fire district. Identify structures needing appropriate addressing and inform and educate property owners of a standard and consistent addressing means.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Newcastle FPD Fire Prevention	Newcastle FPD Administration	Staff time through general fund
NFPD-08	Provide Advanced Life Support (ALS)	Provide daily paramedic staffing on the engine company at all times; 24/7. Procure, maintain, and manage personnel certification and equipment related to Advanced Life Support (ALS).	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Newcastle FPD Operations	Newcastle FPD Administration	Staff time through general fund

20. North Tahoe Fire Protection District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in North Tahoe Fire Protection District (North Tahoe FPD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of North Tahoe FPD, describes who participated in the planning process, assesses North Tahoe FPD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to North Tahoe FPD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

20.1 Hazard Mitigation Planning Team

North Tahoe FPD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Michael Haran, Community Specialist

Address: 222 Fairway Dr, Tahoe City, CA 96145

Phone Number: 530-583-6911

Email: haran@ntfire.net

Alternate Point of Contact: Brent Armstrong, Division Chief and Fire Marshal

Address: 222 Fairway Dr, Tahoe City, CA 96145

Phone Number: 530-583-6911

Email: armstrong@ntfire.net

The Prevention and Forest Fuels Department represented the District on the Planning Partnership and Hazard Mitigation Planning Committee, and supported the local planning process by securing input from persons with specific knowledge to enhance the plan District personnel were asked to contribute to the annex development through conducting public and stakeholder outreach, reviewing and

contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 20-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 20-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Steve Leighton	North Tahoe FPD	Fire Chief	Drafting or Reviewing Parts of the Plan
Brent Armstrong	North Tahoe FPD – Prevention	Division Chief/Fire Marshal	Drafting or Reviewing Parts of the Plan
April Shackelford	North Tahoe FPD – Prevention/Forest Fuels	Forest Fuels Manager	Drafting or Reviewing Parts of the Plan
Michael Haran	North Tahoe FPD – Prevention/Forest Fuels	Community Specialist	Worksheet Input, Hazard History Information, Mitigation Action Updates, Drafting or Reviewing Parts of the Plan

20.2 Community Profile

The North Tahoe FPD was established in 1993 through the consolidation of the Tahoe City FPD (Tahoe City, CA) and the North Tahoe FPD (Kings Beach, CA). In 2025, NTFPD expanded its service area by annexing the Meeks Bay FPD, further strengthening its regional coverage.

Today, the District serves approximately 11,000 households and 1,000 businesses across 32 square miles along the north and west shores of Lake Tahoe. This area includes diverse terrain and communities, requiring a broad range of emergency response capabilities.

North Tahoe FPD operates six strategically located fire stations in Alpine Meadows, Tahoe City, Homewood, Dollar Hill, Carnelian Bay, and Kings Beach. These stations are staffed by 70 uniformed and support personnel, providing fire protection and emergency services to nearly 15,000 residents and visitors.

The District's varied demographics and geography create unique challenges, requiring personnel to be proficient in multiple disciplines, including:

- Wildland and structural firefighting
- Backcountry and technical rescue
- Swift water rescue
- Hazardous materials mitigation
- Emergency medical services

This combination of resources and expertise ensures that North Tahoe FPD can respond effectively to emergencies in rural, suburban, and urban settings, safeguarding lives, property, and the natural environment of the Lake Tahoe region (North Tahoe Fire Protection District 2025).

20.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the North Tahoe FPD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

20.3.1 Outreach Activities

North Tahoe FPD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District posted MJHMP information on their website and on social media. In addition, they conducted outreach to community leaders involved in hazard mitigation activities, including the local Firewise community. Finally, North Tahoe FPD and Placer County Office of Emergency Services attended the Tahoe Farmers Market to promote inter-agency mitigation initiatives, including the MJHMP. Figure 20-1 through Figure 20-4 show these outreach activities.

20.3.2 Public Feedback Integration

Community input was gathered through multiple outreach efforts, including conversations at public events such as the Tahoe City Farmers Market, comments received during defensible space inspection meetings, and responses submitted through community surveys. Through these engagement opportunities, residents consistently identified wildfire as their primary concern, noting the increased risk during periods of high winds and dry conditions. Residents frequently asked about defensible space requirements, home-hardening measures, vegetation management, how inspection results may affect insurance, and what actions the District is taking to reduce wildfire risk.

This feedback was incorporated into the planning process and used to validate and refine the hazard rankings. As a result, the final rankings reflect not only technical assessments but also the community's lived experience and the issues they view as most important.

Figure 20-1. Virtual Public Outreach - Website

Figure 20-2. Social Media Post

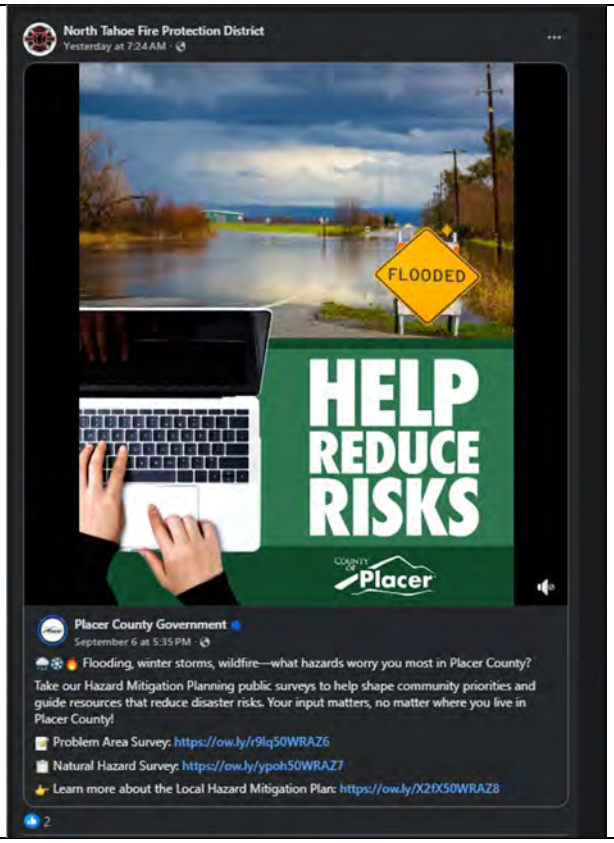


Figure 20-3. Outreach Emails

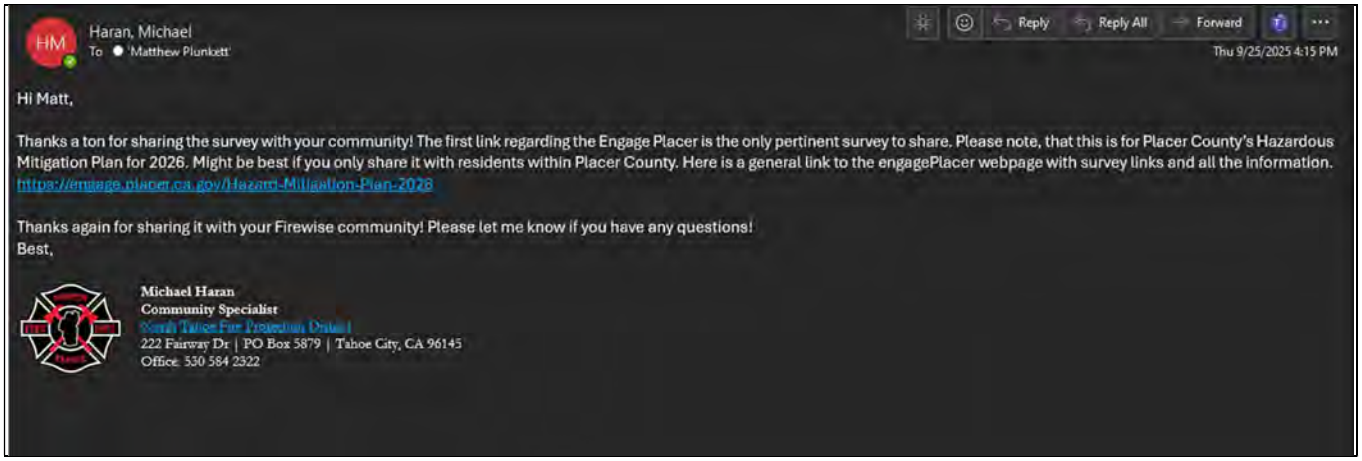


Figure 20-4. Booth at Tahoe City Farmers Market

20.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

20.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County. Stakeholders at all levels, public agencies, private organizations, and community partners, collaborate to reduce risk and enhance resilience. This cooperation includes sharing information, aligning priorities, and coordinating actions to address hazards effectively and protect people, property, and essential services.

- CAL FIRE
- North Tahoe Public Utility District
- Placer County Office of Emergency Services
- Placer County Sheriff's Office
- Tahoe City Public Utility District
- Tahoe Resource Conservation District
- Tahoe Truckee Unified School District

20.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. Stakeholders at all levels, public agencies, private organizations, and community partners, collaborate to reduce risk and enhance resilience. This cooperation includes sharing information, aligning priorities, and coordinating actions to address hazards effectively and protect people, property, and essential services.

- Placer County Community Development Resource Agency & Planning Services
- Tahoe Regional Planning Agency

20.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District. TCPUD and NTPUD address similar hazard mitigation concerns, and although serving different regions, Olympic Valley Fire and North Tahoe Fire also share common priorities.

- El Dorado County Office of Emergency Services
- Lake Valley FPD
- North Lake Tahoe FPD
- North Tahoe Public Utility District
- Olympic Valley Fire
- Tahoe City Public Utility District
- Town of Truckee

20.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District.

- Tahoe Truckee Unified School District
- Tahoe City Downtown Association

20.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District.

- CERT Team
- Sierra Community House

20.5 Jurisdictional Capability Assessment

North Tahoe FPD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, North Tahoe FPD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use

regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

North Tahoe FPD has strong capabilities in defensible space enforcement, fuels management, and community outreach. However, gaps remain in post-disaster debris planning, staffing for GIS and resilience expertise, and dedicated funding for long-term mitigation. Retrofit requirements for older homes are limited, leaving a portion of the housing within the District at high risk. Stronger integration and utilization of the District's Community Risk Reduction plan would improve alignment of wildfire risk reduction priorities.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

20.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 20-2 summarizes the ordinances currently in place in the District.

Table 20-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
2022 California State Building Code, Title 24, Adopted Jan 1, 2023 **Placer County Code, Chapter 15** **2025 North Tahoe FPD Fire Code Ordinance**	Establishes structural, fire & life safety, seismic, snow load, and wildfire-resistant construction standards. Placer County strengthens state code with local amendments, and NTFPD enforces fire/life safety and defensible space.	Could expand and improve by requiring ember resistant retrofits, additional WUI hardening standards	California Building Standards Commission (state) Placer County Building Division (Local/County) NTFPD Prevention (Fire/Life Safety)
California Fire Code **Title 24, Part 9** **January 1, 2026**	The California Fire Code is a comprehensive set of state regulations based on the International Fire Code (IFC) that establishes standards for life and property safety from fire and explosion hazards. It covers areas such as the storage and handling of hazardous materials, building construction, fire suppression systems, and conditions hazardous to life and property.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
Zoning/Land Use Code **California Government Code (state zoning enabling authority)** **Placer County Code Chapter 17 Zoning adopted 2021**	Governs land use and development. Zoning overlays reduce development in hazard areas. NTFPD reviews for fire access and hydrants.	Could expand to require wildfire hazard overlays and defensible space breaks adjacent to all subdivisions	California State Government Placer County Planning Services NTFPD Prevention
Subdivision Code **California Subdivision Map Act** **Placer County Code Chapter 16**	Establishes subdivision layout and access standards. NTFPD reviews for emergency access, hydrants, and defensible space compliance.	Could expand by requiring secondary access and wildfire adapted infrastructure in all new subdivisions.	California Department of Real Estate Placer County Planning Services NTFPD Prevention
Site Review Code **Placer County Code Chapter 17 Zoning adopted 2021**	Requires review of new developments for safety and environmental impacts. NTFPD review for emergency access, hydrants, and defensible space.	Could expand to require wildfire adapted landscaping and building design.	Placer County Planning NTFPD Prevention

20.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 20-3 summarizes the plans currently in place. These mitigation and response plans have already been integrated into the MJHMP, as described in the second column below. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects, can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table below will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

Table 20-3. Plans

Nake of Plan, Date Last Update	Integration	Expand and Improve	Department Responsible
Community Risk Reduction Plan adopted February 2023	NTFPD's Community Risk Reduction Plan functions as a master plan for risk reduction, aligning with the Community Wildfire Protection Plan to prioritize defensible space, fuels reduction, and fire and life safety. This plan is integrated with the 2021 MJHMP.	Could expand by including other plans to create a more comprehensive Master Plan	NTFPD Chief Offices and Administration Divisions
Apparatus replacement plan Adopted 2024-2025	NTFPD has an apparatus replacement plan, which serves to plan and implement new additional apparatus to better serve the community and prepare for natural hazards. Facilities replacement and maintenance plan still under development.	Could expand by aligning with the projects with wildfire risk reduction identified in the Community Risk Reduction Plan	NTFPD Chief Offices, Finance, Administration Divisions
North Tahoe Fire 2025 CWPP adopted 2024 **Lake Tahoe Basin Multi-Jurisdictional Community Wildfire Protection Plan adopted and updated 2025**	The Community Wildfire Protection Plan identifies fuel reduction zones, and evacuation needs. This plan is integrated with the 2021 MJHMP.	Could expand integration between the Community Wildfire Protection Plan and Community Risk Reduction Plan.	NTFPD Chief Offices and Prevention Tahoe Fire and Fuels Team
2019 Lake Tahoe Basin Forest Action Plan	The Forest Action Plan contains three overarching strategies that support completing and maintaining all wildland-urban interface treatments, and implementing large-landscape restoration. This plan is integrated with the 2021 MJHMP.	Could expand integration between the plan and Community Risk Reduction Plan.	NTFPD Chief Offices and Prevention Tahoe Fire and Fuels Team

20.5.3 Development and Permitting Capability

NTFPD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

20.5.4 Administrative Capability

Table 20-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 20-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Planning Board/Commission	Fire prevention staff participates when applicable in plan review, zoning updates.

Capability	Description, Expansion, Improvement
Zoning Board of Adjustment	Fire prevention staff participates when applicable in plan review, zoning updates.
Mitigation Planning Committee	Committee includes staff from Prevention, Administration/Finance, Community Outreach divisions.
Emergency Management/Public Safety Department	Fire Prevention District.
Mutual aid agreements	Mutual Aid Agreements with Olympic Valley Fire, Northstar Fire, North Lake Tahoe Fire, Tahoe Douglas Fire, South lake Tahoe Fire, Lake Valley Fire, Fallen Leaf Fire, Truckee Fire, CalFire, United States Forest Service
Human Resources Manual ***e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?***	Forest Fuels Manager and Community Specialist.

20.5.5 Technical Capability

Table 20-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 20-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Planners or engineers with knowledge of land development and land management practices	Chief Offices, Fire Prevention Officer II, Forest Fuels Manager
Engineers or professionals trained in building or infrastructure construction practices	Fire Prevention Officer II, Fire Prevention Officer I and Facilities Manager
Planners or engineers with an understanding of natural hazards	Fire Prevention Officer II, Forest fuels manager, Prevention
Professionals trained in conducting damage assessments	Prevention Staff including Fire Prevention Officer II and Fire Prevention II
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Forest Fuels Manager
Staff that work with socially vulnerable populations or underserved communities	Prevention, Community Outreach
Grant Managers and/or Writer(s)	Forest Fuels Manager and Administration

20.5.6 Fiscal Capabilities

Table 20-6 summarizes financial resources available to North Tahoe FPD.

Table 20-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Apparatus Replacement Plan, NTFPD Capital Facilities and Mitigation Fee Expenditure Plan
Authority to levy taxes for specific purposes	North Tahoe Fire has special tax approved by voters in 2005, and a separate assessment passed by property owners in 2007

Financial Resources	Description, Expansion, Improvement
Impact fees for homebuyers or developers of new development/homes	Capital Facilities and Mitigation Fees for new development within the district
Incur debt through general obligation bonds	NTFPD has the authority to incur debt through general obligation bonds, although never has been utilized and would require voter approval
Incur debt through special tax bonds	Can be done by creating special district (Mello-Roos community facilities district)
Other federal or state Funding Programs	Both Federal and State grants including Southern Nevada Public Land Management act through Bureau of Land Management, California Tahoe Conservancy Grant

20.5.7 Education and Outreach Capability

Table 20-7 summarizes the education and outreach resources available to North Tahoe FPD.

Table 20-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Prevention / Chief Officer and Community Specialist
Personnel skilled or trained in website development	Contracted Staff
Hazard mitigation information available on your website	https://www.ntfire.net/placer-county-hazardous-mitigation-plan
Social media for hazard mitigation education and outreach	Facebook, Instagram, Nextdoor
Community newsletter	Ntfire.net/news
Local news	NTFPD can provide wildfire updates through local TV, radio and print outlets
Citizen boards or commissions that address issues related to hazard mitigation	Firewise Committees and neighborhoods address issues related to hazard mitigation. The Tahoe Fire and Fuels team partners with NTFPD to engage citizens.
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	Seasonal campaigns throughout the year dependent season. Campaigns include public outreach events at farmers markets, coffee shops, among others.
Natural disaster/safety programs in place for schools	NTFPD collaborates with local school district to inform and educate. NTFPD is also collaborating on Tahoe Truckee Unified School District's Local Hazard Mitigation Plan.
Organizations that conduct outreach to socially vulnerable populations and underserved communities	NTFPD works with several local organizations such as Tahoe Resource Conservation District, Tahoe City Downtown Association, among others.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Newsletter outreach, public events and workshops, social media.

20.5.8 Community Classifications

Table 20-8 summarizes classifications for community programs available to North Tahoe FPD.

Table 20-8. Community Classifications

Program	Participating?	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	2023
Firewise Communities classification	Yes	N/A	N/A
CAL FRE Risk Reduction Community List	Yes	N/A	2024/2026

20.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk.

Table 20-9 summarizes the adaptive capacity for each identified hazard of concern and the County's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 20-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Moderate – North Tahoe FPD personnel are trained to respond to events such as ice/swift water/back country rescues.
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Moderate - North Tahoe FPD personnel are trained to respond to events such as ice/swift water/back country rescues.
Heavy Rains and Storms	Moderate – North Tahoe FPD personnel are trained to respond to events such as heavy rains and storms.
High Winds and Tornadoes	Weak
Wildfire	Strong

20.6 National Flood Insurance Program

North Tahoe FPD is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

20.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of North Tahoe FPD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

20.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 20-5 through Figure 20-9. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which North Tahoe FPD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 20-5. Avalanche Hazard Area

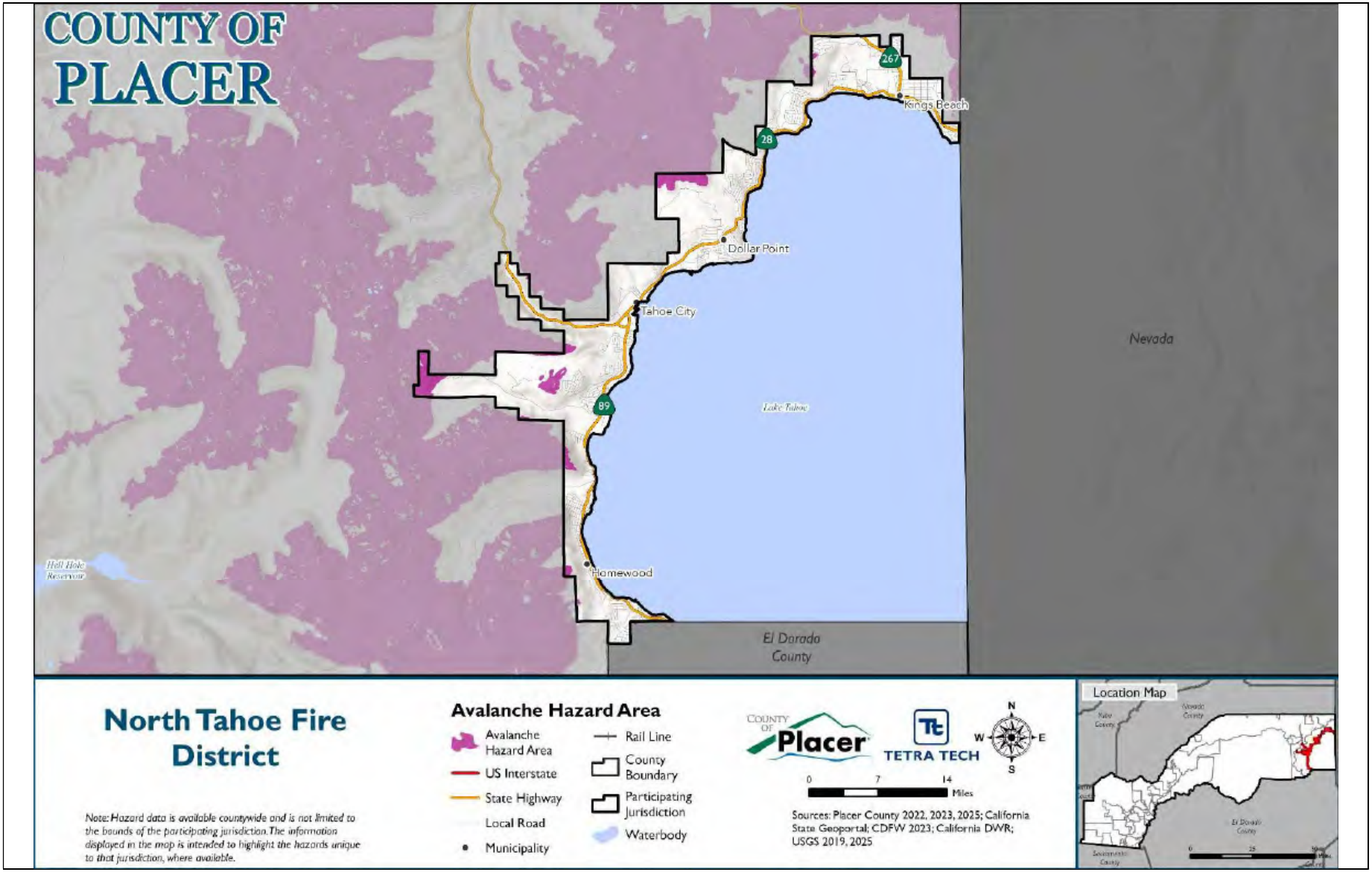


Figure 20-6. Flood Hazard Area

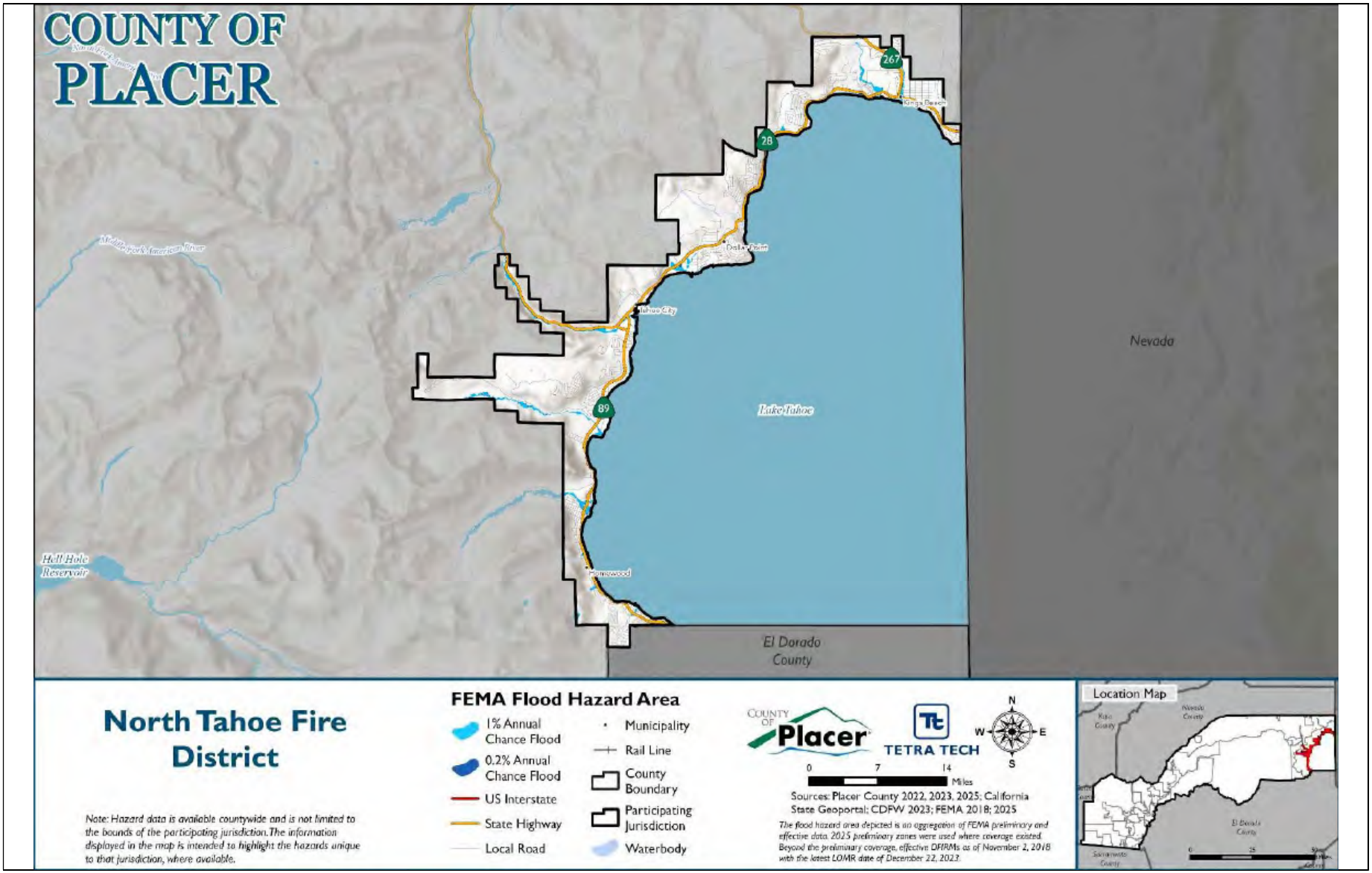


Figure 20-7. Landslide Hazard Area

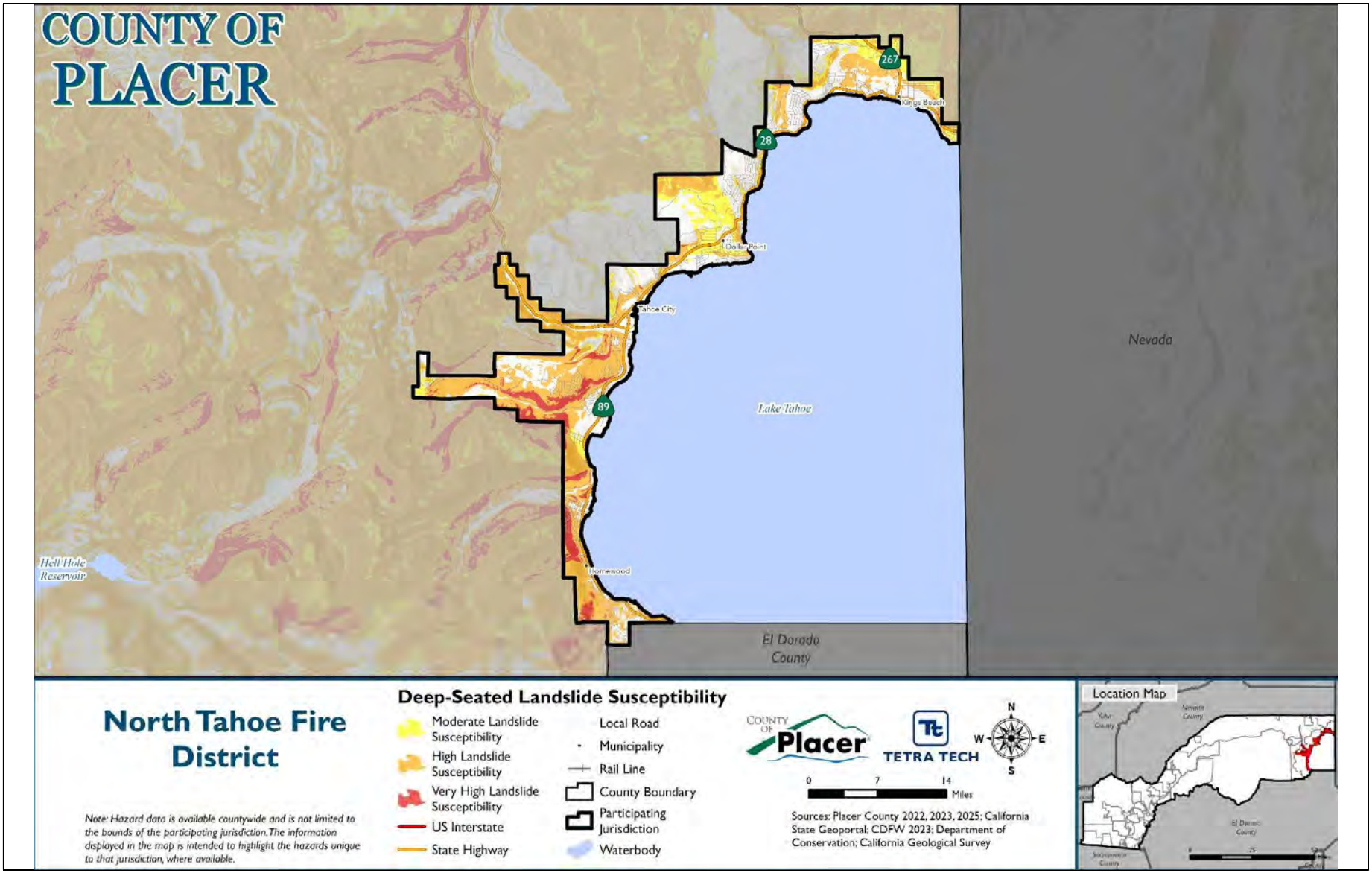


Figure 20-8. NEHRP Soil Class D Hazard Area

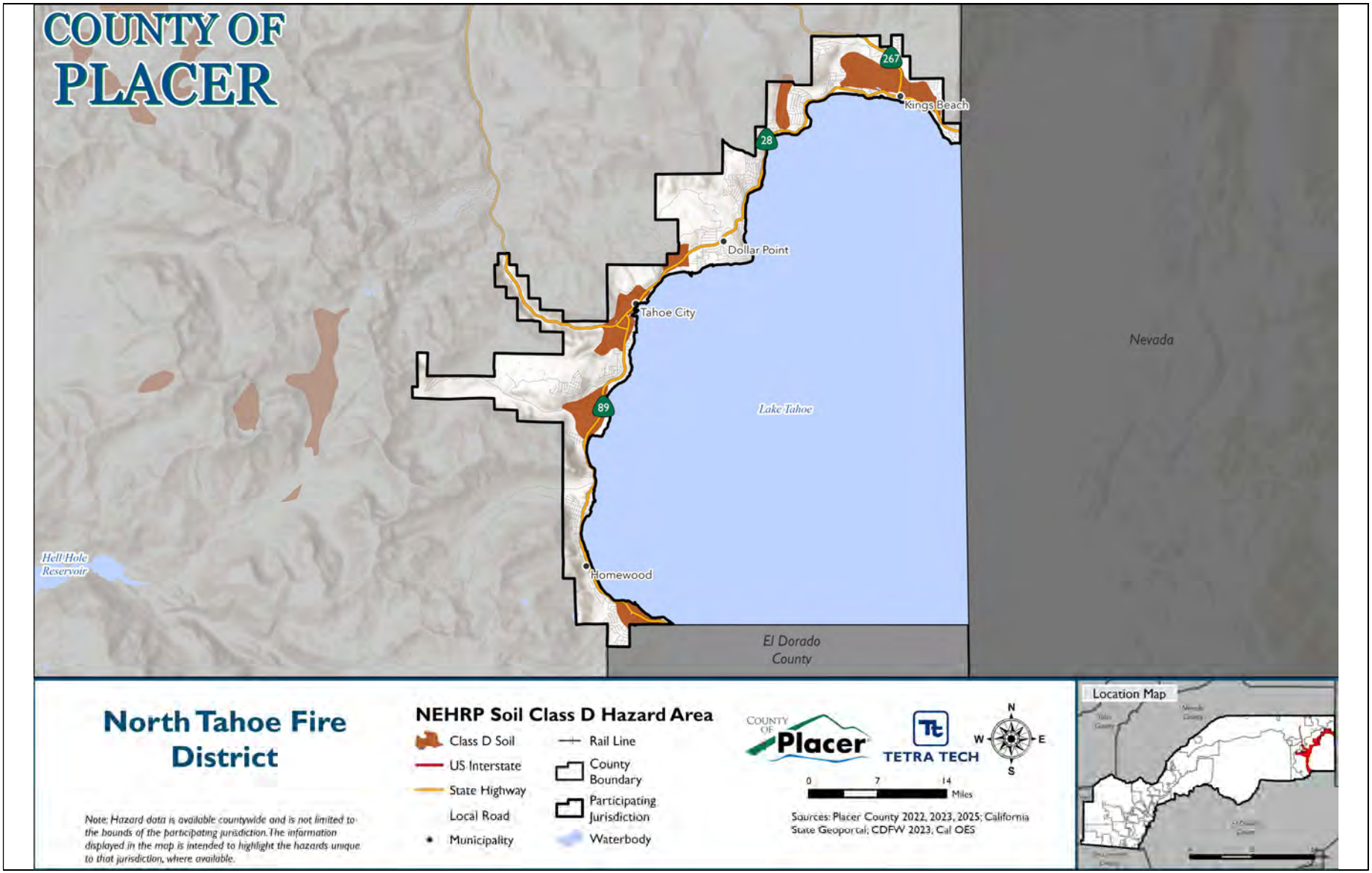
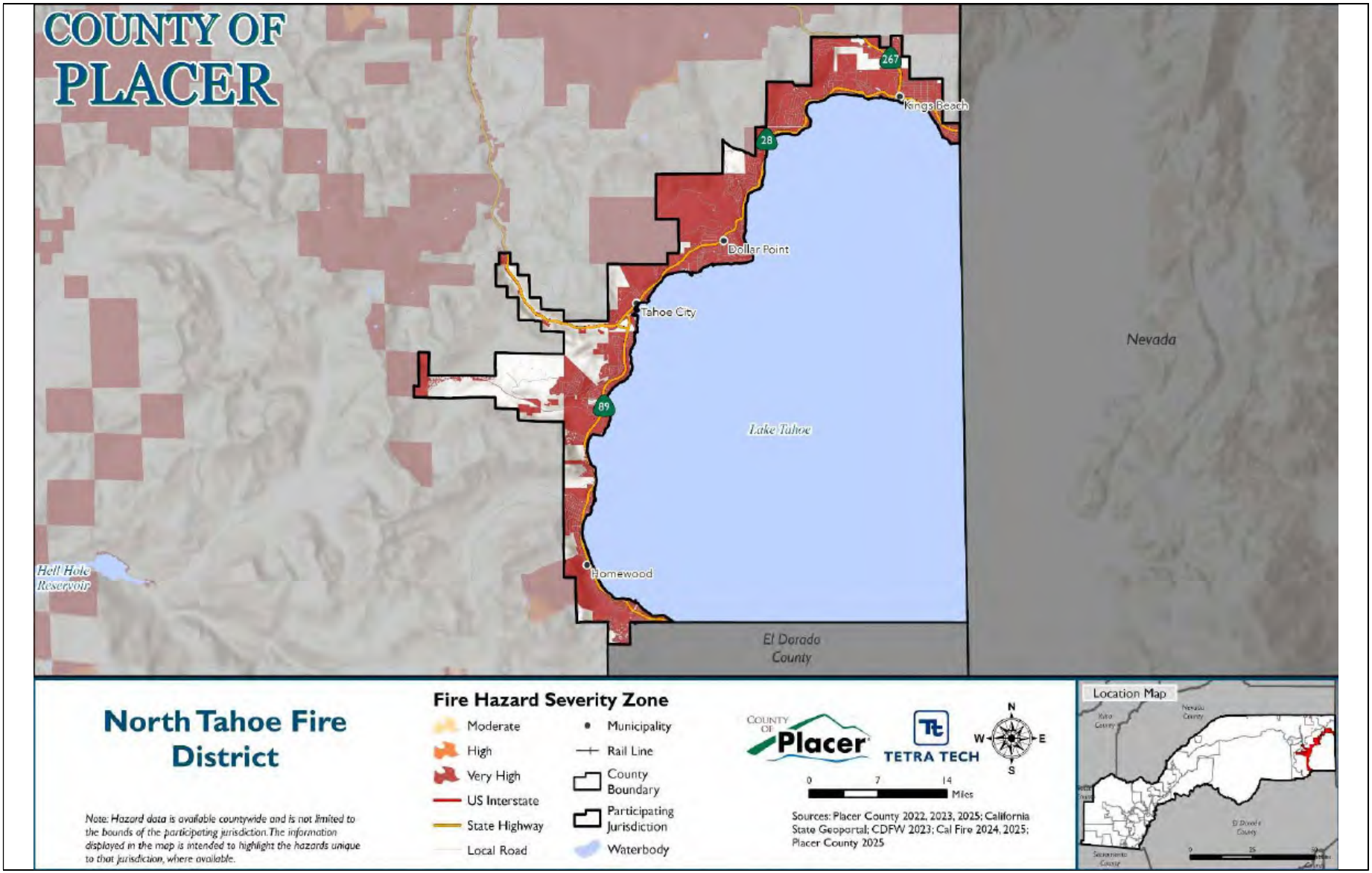


Figure 20-9. Wildfire Hazard Area



20.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of events that have impacted the overall planning area. For North Tahoe FPD, there are no known past hazard events that have caused losses or damage to the District since the last LHMP.

20.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

North Tahoe FPD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- The hazard ranking for freeze and snow has increased from low to medium.
- The hazard ranking for high winds and tornadoes has also risen from low to medium.
- The hazard ranking for avalanches has risen from low to medium.
- The hazard ranking for drought and water shortages has risen from low to medium.
- The hazard ranking for earthquakes has risen from low to medium
- The hazard ranking for heavy rains and storms has risen from low to high.

Table 20-10 shows North Tahoe FPD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 20-10. Hazard Ranking

Hazard	Rank
Avalanche	Medium
Dam and Levee Failure	Low
Drought and Water Shortage	Medium
Earthquake	Medium
Flood	Low
Freeze and Snow	Medium
Heavy Rains and Storms	High
High Winds and Tornadoes	Medium
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

20.7.4 Vulnerability Assessment

Table 20-11 lists issues related to the top hazards of concern for North Tahoe FPD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 20-11. Hazard Issues

Issue	Related Hazards
The Lake Tahoe area often experiences significant seasonal population growth for recreation and public events. A natural hazard event during this time would hinder response time and evacuation efforts.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Communications, including radio and cell service, do not work effectively.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
The District currently uses outdated and inaccurate mapping information to assess and identify hazards.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
The District participates in several wildfire mitigation plan and lacks funding to implement the projects.	Wildfire
In order to develop a comprehensive map of fire hydrants in the Lake Tahoe area, the District must collaborate with multiple other special districts.	Wildfire
While the County recently completed an Avalanche Risk Reduction and Response Plan, training and equipment are needed to implement that plan.	Avalanche, Freeze and snow

20.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 20-12 describes the potential impacts of the hazards of local concern to North Tahoe FPD (hazards identified as medium or high risk in Table 20-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 20-12. Hazard Impacts

Hazard	Potential Impacts
Freeze and Snow	Severe freeze and snow events can disrupt transportation routes, delay emergency response, and damage critical infrastructure such as water systems and communications equipment. Prolonged conditions may isolate parts of the District, requiring coordinated efforts with regional partners to maintain access and share resources. All facilities and equipment could be affected or damaged by freeze and snow, including but not limited to, Station 51, Station 52, Station 53, Station 54, Station 55, Station 56, Station 58, Ambulances, Type 1 Engines, Type 3 Engines, Type 6 Wildland Fire Engine, Water Tender, Snowmobiles, Rescue UTV's, Air Trailers, Prevention Vehicles, Maintenance Vehicles and Trailers. Communications and Electronic Technology, and Personal Protective Equipment.
High Winds and Tornadoes	High winds and tornadoes can damage facilities, down power lines, and impair communications systems, creating challenges for emergency coordination. These events may also block roads with debris, requiring collaboration with local agencies for clearance and restoration of essential services. All facilities and equipment could be affected or damaged by high winds, including but not limited to, Station 51, Station 52, Station 53, Station 54, Station 55, Station 56, Station 58, Ambulances, Type 1 Engines, Type 3 Engines, Type 6 Wildland Fire Engine, Water Tender, Snowmobiles, Rescue UTV's, Air Trailers, Prevention Vehicles, Maintenance Vehicles and Trailers. Communications and Electronic Technology, and Personal Protective Equipment.
Landslides, Mudslides, and Debris Flow	Slope failures and debris flows can block access roads, damage facilities, and disrupt utilities, limiting emergency response capabilities. Effective mitigation and response depend on strong communication and resource-sharing among district and regional partners to restore access and maintain safety. All facilities and equipment could be affected or damaged by landslides, mudslides, and debris flow, including but not limited to, Station 51, Station 52, Station 53, Station 54, Station 55, Station 56, Station 58, Ambulances, Type 1 Engines, Type 3 Engines, Type 6 Wildland Fire Engine, Water Tender, Snowmobiles, Rescue UTV's, Air Trailers, Prevention Vehicles, Maintenance Vehicles and Trailers. Communications and Electronic Technology, and Personal Protective Equipment. The very most vulnerable facilities and equipment include but are not limited to Station 52, situated along the Griff Creek Flood area and on a Class D Soil area, Station 51 situated on a Class D Soil area and high landslide susceptibility area, and Station 53 located in a high landslide susceptibility area.
Wildfire	Most of the District is located in the Very High Fire Hazard Severity Zone. Wildfire poses a significant threat to District facilities, equipment, and personnel, while also impacting communications infrastructure and evacuation routes. Coordinated planning and collaboration with local and regional agencies are essential for resource allocation, situational awareness, and effective response. All facilities and equipment could be affected or damaged by wildfire, including but not limited to, Station 51, Station 52, Station 53, Station 54, Station 55, Station 56, Station 58, Ambulances, Type 1 Engines, Type 3 Engines, Type 6 Wildland Fire Engine, Water Tender, Snowmobiles, Rescue UTV's, Air Trailers, Prevention Vehicles, Maintenance Vehicles and Trailers. Communications and Electronic Technology, and Personal Protective Equipment.

20.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect North Tahoe FPD's overall vulnerability since the previous plan was approved.

20.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

20.8.1 Changes in Community Priorities

The District's priorities have evolved to focus on enhancing communication, improving situational awareness, and strengthening community resilience. Recent efforts emphasize the integration of advanced technology for emergency notifications and mapping, fostering interagency collaboration, and addressing critical infrastructure needs to support fire suppression and risk reduction. Additionally, the District has placed greater importance on proactive planning and mitigation strategies to reduce vulnerability to natural hazards, ensuring a more comprehensive and coordinated approach to emergency preparedness and response.

20.8.2 Past Mitigation Action Status

Table 20-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 20-13. Status of Previous Mitigation Actions

Action No.	Project Description	Project Name	Status	Include in new strategy ?	IF NO, explain why no longer relevant
1	NTFPD to work directly with Placer County and other partner agencies to assist in the development of an Avalanche Risk Reduction and Response Plan and conduct Pre-Incident Training (sand table or mock avalanche) to ensure all responding agencies can efficiently and cohesively respond to avalanche events. NTFPD to conduct a review and update to their Avalanche Response Policy and a study to determine what apparatus and equipment purchases are needed to be well-equipped for response to this hazard.	Avalanche: Risk Reduction, Response Plan, and Pre-Incident Training	Complete	Yes	It is now an active response plan.

Action No.	Project Description	Project Name	Status	Include in new strategy ?	IF NO, explain why no longer relevant
2	NTFPD will plan and implement communications related upgrades, developments, replacements, maintenance, and enhancement of current systems in order to meet cross-jurisdictional interoperability needs.	Communications: Upgrades, Development, Maintenance, and Enhancement of Interoperability Radio Systems	Not Complete	Yes	
3	Implement the Lake Tahoe Multi-Jurisdictional Fuel Reduction & Wildfire Prevention Strategy, Lake Tahoe Basin Community Wildfire Protection Plan, and the Lake Tahoe Basin Forest Action Plan within communities that NTFPD serves. Projects include but not limited to: ➢ Collaborate and plan projects and initiatives with all interested partners ➢ Prioritize Hazardous Fuel Reduction ➢ Restore & Maintain Fire-Resilient Landscapes ➢ Provide Effective & Efficient Wildfire Response ➢ Treat Structural Ignitability ➢ Defensible space inspections, education, assistance and enforcement ➢ Home Hardening and retrofit education and assistance ➢ Residential Chipping program, Greenwaste & Biomass utilization and disposal ➢ Tree Marking and Tree Removal Permits ➢ Create Fire Adapted Communities ➢ Coordinate Firewise USA recognition ➢ Encourage and provide effective and appropriate Forest Management and Fuels Reduction to act and adapt to a changing climate ➢ Implement the Tahoe PTEIR Program ➢ Provide robust public outreach and education ➢ Provide Community Assistance and Incentivization	Community Wildfire Prevention Plan Implementation: Forest Management, Fuels Reduction, Defensible Space, Home Hardening, Curbside Chipping, Greenwaste Disposal, Tree Marking, Fire Adapted and Firewise Communities, Outreach & Education	Not Complete	Yes	
4	Identify personnel to receive in-depth ArcGIS training and purchase all necessary GIS licensing and equipment to support the District's GIS capabilities and needs. Retain an annual GIS budget to train current staff or consider contracting out in-depth GIS data analysis, map creation and geographic data entry needs.	GIS Technology, Equipment, Database and Mapping Improvements	Not Complete	Yes	

Action No.	Project Description	Project Name	Status	Include in new strategy ?	IF NO, explain why no longer relevant
5	North Tahoe Fire has identified essential supplies, functions and services needed to sustain its mission and operations during a pandemic. In order to perform our mission, the District must have an adequate supply of PPE and disinfecting methodologies to protect staff, facilities and equipment in order to safely serve our community. The project reflects lessons learned from the response so far, and serves as a basis for continued preparedness and progress through and beyond the current pandemic. A Pandemic Preparedness Response Plan includes an available cache of: ➢ Gloves ➢ Masks, Face Coverings, and N95s ➢ Face shields ➢ Booties ➢ Goggles ➢ Gowns ➢ PAPRs ➢ Disinfecting sprays/treatments ➢ Sterilizing equipment for ambulances, engines, equipment and facilities ➢ Material for vertical separations ➢ Virus Testing ➢ Vaccines	Pandemic Preparedness and Response Plan	Complete	No	Pandemic is no longer a significant issue, and is now being managed by public health.

Action No.	Project Description	Project Name	Status	Include in new strategy ?	IF NO, explain why no longer relevant
6	North Tahoe FPD, in partnership with the Tahoe Transportation District, will work with regional partners to build an interoperability situational awareness platform and associated public warning system that can support and integrate with regional dispatch systems, Nevada Dept. of Transportation (NDOT), Caltrans ITS systems, and the AlertTahoe System (http://www.alertwildfire.org/tahoe/). NDOT, Highway Patrol, and the Regional Transportation Commission (RTC) of Southern Nevada are implementing a “Software as a Service” platform that was integrated with the RTC’s ITS system, and Nevada is expanding the system statewide. Southern Nevada’s initial findings have shown an improvement of 10 to 15 minutes in incident response time in just a few months’ time. They are integrating fire incidents into the system and are expecting similar improved performance in fire response times. The system uses real-time data to provide automated incident identification through a multitude of sources, such as inductive loop traffic detectors, microwave vehicle detectors, on-board devices (OBD II), navigation apps, telematics, weather data, special events (Ticketmaster), dynamic warning signs, construction and road closure information, road camera feeds, traffic crashes and incidents (through crowd sourcing, such as Waze and the 911 systems), and public transit information. The demonstration system is now moving towards more predictive insights and early warnings for proactive crash prevention and dynamic traffic flow optimization. The Utility and Infrastructure project, Tahoe Evacuation Notification System (TENS), will provide a cross-jurisdictional system that emergency managers will use to improve performance, while providing predictive insights and more connectivity between first responders, traffic and transit operations, and the public. The system will integrate publicly available datasets to provide a better understanding of visitors in the Lake Tahoe Basin, including travel movements and duration of stay, emergency roadway issues including closures or hazards caused by landslides, fires, toxic spills, avalanches, tree falls, downed power lines and power outages. These criteria will be considered for real-time detection and notification systems and reduction in secondary incidents. As wildland fire is the biggest risk in the Tahoe Basin, further benefits will include early notification of wildland fire through the Alert Tahoe Camera system that will allow fires to be pinpointed and relayed back into the end warning system. Additionally, the application will provide location information to direct the public to defibrillators placed throughout public areas within the Basin. Smart streetlights will be utilized for housing a variety of warning systems and to provide input to public agencies for overall situational awareness that can influence disaster management and evacuations. Public notifications and overall public agency situational awareness input would include audio speakers, siren warning systems, dynamic message boards, outdoor acoustic sensors, weather sensors, camera systems, and lights to influence directional traffic flows in the event of evacuations. Although the intent of these devices is not to provide communications, they are built to communicate these disaster warnings and notifications back to the public, including a multi-lingual fashion if required by the demographic aspect of the communities.	Tahoe Emergency Notifications System (TENS)	Not Complete	Yes	

Action No.	Project Description	Project Name	Status	Include in new strategy ?	IF NO, explain why no longer relevant
7	North Tahoe and Meeks Bay FPDs (NTFPD) will facilitate development of a collaborative "Water for Fire Suppression" partnership to inspect, test, paint, document data in GIS layer, and provide notifications in order to mitigate varying concerns and inadequacies with water delivery and storage on the California side of the Lake Tahoe Basin within District boundaries. This collaborative will allow NTFPD to interface with 16 water purveyors across 1055 fire hydrants in order to best serve 17,0000 structures during fire season and winter weather alike.	Water for Fire Suppression Collaborative	Not Complete	Yes	

20.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, North Tahoe FPD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- North Tahoe FPD has expanded and improved the educational and required defensible space inspection programs. These programs serve to address and improve wildfire resilience within the community's neighborhoods.
- North Tahoe FPD's Forest Fuels program continues to plan and implement Fuels Reduction Projects within the WUI to strengthen wildfire resilience and help future wildfire be more manageable and less intense.
- In 2012, North Tahoe FPD completed a new station, Station 51. It is a full-time staffed station and also houses the administration and Fire Prevention Bureau. This station strengthens the District's mission to provide the highest possible level of fire and life safety, rescue and emergency medical service, and fire prevention and public education to the citizens and visitors of the communities the District serves.

20.8.4 Hazards Omitted from Mitigation Strategy

The District included all identified hazards in its mitigation strategy; none were omitted.

20.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that North Tahoe FPD would like to pursue in the future to reduce the risk from hazards.

Table 20-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 20-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	X	X	-	X
Dam and Levee Failure	X	X	-	X
Drought and Water Shortage	X	X	-	X
Earthquake	X	X	-	X
Flood	X	X	-	X
Freeze and Snow	X	X	-	X
Heavy Rains and Storms	X	X	-	X
High Winds and Tornadoes	X	X	-	X
Landslides, Mudslides, and Debris Flows	X	X	-	X
Wildfire	X	X	-	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 20-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 20-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
NTFPD-01	Tahoe Emergency Notifications System (TENS)	15	1-5 Years	High	Medium	10.75	High
NTFPD-02	Interoperable Communications Systems	15	1-5 Years	High	High	9.75	High
NTFPD-03	GIS Mapping Improvements	15	1-5 Years	Low	Medium	8.75	High
NTFPD-04	Community Wildfire Prevention Plan Implementation	1	1-5 Years	High	High	6.25	Medium
NTFPD-05	Water for Fire Suppression Collaborative	1	1-10 Years	High	High	5.25	Low
NTFPD-06	Avalanche Risk Reduction	2	1-10 Years	Low	Medium	4.5	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

20.8.6 Mitigation Strategy

Table 20-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. North Tahoe FPD Prevention Division will lead implementation of all projects listed in Table 20-16. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 20-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
NTFPD-01	Tahoe Emergency Notifications System (TENS)	North Tahoe FPD will work with the Tahoe Transportation District and other regional partners to support the implementation of an interoperable situational awareness and public warning system for the Lake Tahoe Basin. The platform will integrate transportation, weather, sensor, and crowdsourced incident data with regional dispatch, Caltrans, Neveda Department of Transportation, and AlertTahoe systems to improve detection, coordination, and evacuation decision-making. Similar systems in Southern Nevada have already reduced incident response times by 10-15 minutes, with comparable benefits expected for fire and emergency response. NTFPD will contribute fire, wildfire detection, and evacuation expertise to ensure the system enhances life safety and emergency.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Tahoe Transportation District, Caltrans, Nevada Department of Transportation System, Placer County, El Dorado County, Placer County Sheriff's Department, El Dorado Sheriff's Department, California Highway Patrol	FEMA Hazard Mitigation Grant Program
NTFPD-02	Interoperable Communications Systems	The District will plan and implement communications related projects to increase the capacity and level of protection provided by the communications system including, but not limited to, developments, replacements, maintenance, and enhancement of current systems in order to meet cross-jurisdictional interoperability needs.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	FEMA, Placer County, CalOES	FEMA Hazard Mitigation Grant Program
NTFPD-03	GIS Mapping Improvements	Identify personnel to receive in-depth ArcGIS training and purchase all necessary GIS licensing and equipment to support the District's GIS capabilities and needs. Retain an annual GIS budget to train current staff or consider contracting out in-depth GIS data analysis, map creation and geographic data entry needs.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Placer County, El Dorado County, Tahoe Resource Conservation District, CalFire	FEMA Hazard Mitigation Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
NTFPD-04	Community Wildfire Prevention Plan Implementation	Implement the Lake Tahoe Multi-Jurisdictional Fuel Reduction & Wildfire Prevention Strategy, Lake Tahoe Basin Community Wildfire Protection Plan, and the Lake Tahoe Basin Forest Action Plan within communities that the District serves. Projects include, but are not limited to: ➢ Collaborate and plan projects and initiatives with all interested partners ➢ Prioritize Hazardous Fuel Reduction ➢ Restore & Maintain Fire-Resilient Landscapes ➢ Provide Effective & Efficient Wildfire Response ➢ Treat Structural Ignitability ➢ Defensible space inspections, education, assistance and enforcement ➢ Home Hardening and retrofit education and assistance ➢ Residential Chipping program, Greenwaste & Biomass utilization and disposal ➢ Tree Marking and Tree Removal Permits ➢ Create Fire Adapted Communities ➢ Coordinate Firewise USA recognition ➢ Encourage and provide effective and appropriate Forest Management and Fuels Reduction to act and adapt to a changing climate ➢ Implement the Tahoe PTEIR Program ➢ Provide robust public outreach and education ➢ Provide Community Assistance and Incentivization	Wildfire	US Forest Service, California Tahoe Conservancy, California State Parks, Bureau of Land Management, Placer County, FEMA	FEMA Hazard Mitigation Grant Program
NTFPD-05	Water for Fire Suppression Collaborative	North Tahoe and Meeks Bay FPDs will facilitate development of a collaborative “Water for Fire Suppression” partnership to inspect, test, paint, document data in GIS layer, and provide notifications in order to mitigate varying concerns and inadequacies with water delivery and storage on the California side of the Lake Tahoe Basin within District boundaries. This collaborative will allow the Districts to interface with 16 water purveyors across 1055 fire hydrants in order to best serve 17,0000 structures during fire season and winter weather alike.	Wildfire	Tahoe City Public Utility District, North Tahoe Public Utility District, Private Water Purveyors	FEMA Hazard Mitigation Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
NTFPD-06	Avalanche Risk Reduction	The District will work directly with Placer County and other partner agencies to assist in the development of an Avalanche Risk Reduction and Response Plan and conduct Pre-Incident Training (sand table or mock avalanche) to ensure all responding agencies can efficiently and cohesively respond to avalanche events. The District will conduct a review and update to their Avalanche Response Policy and a study to determine what apparatus and equipment purchases are needed to be well-equipped for response to this hazard.	Avalanche, Freeze and snow	FEMA, Placer County Office of Emergency Services, Caltrans	FEMA Hazard Mitigation Grant Program

21. North Tahoe Public Utility District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in North Tahoe Public Utility District (NTPUD or District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of North Tahoe Public Utility District, describes who participated in the planning process, assesses North Tahoe Public Utility District's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to North Tahoe Public Utility District as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

21.1 Hazard Mitigation Planning Team

North Tahoe Public Utility District identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Suzi Gibbons, Contract and Planning Coordinator

Address: 875 National Avenue, Tahoe Vista, CA 96148

Phone Number: 530-546-4212 ext. 5433

Email: sgibbons@ntpud.org

Alternate Point of Contact: Joe Pomroy, Engineering and Operations Manager

Address: 875 National Avenue, Tahoe Vista, CA 96148

Phone Number: 530-546-4212 ext. 5430

Email: jpomroy@ntpud.org

The Planning and Engineering Department represented the community on the Planning Partnership and Hazard Mitigation Planning Committee and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to

the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 21-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 21-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Suzi Gibbons	Planning & Engineering	Contracts & Planning Coordinator	Plan coordination & District point of contact
Joe Pomroy, P.E.	Planning & Engineering	Engineering & Operations Manager	Technical input & review
Nathan Chorey, P.E.	Planning & Engineering	Engineering Manager	Technical input & review
Justin Broglio	Administration	Government & Community Affairs Manager	Stakeholder outreach & public outreach
Brad Johnson, P.E.	Administration	General Manager/CEO	Plan oversight
Board Members	Board	Board of Directors	Plan adoption

21.2 Community Profile

NTPUD was formed in 1948 under the State of California Public Utilities Code to provide sewer services to the residents of the north shore of Lake Tahoe. The District's boundaries range from the Nevada state line in Crystal Bay to Dollar Hill. The District service area includes the communities of Kings Beach, Tahoe Vista, Brockway Vista, Carnelian Bay, Cedar Flat and Agate Bay. In November of 1967, water services were added to the District's responsibility with the Recreation and Parks Department being created in 1968. The District owns, manages, and maintains Secline Beach, the Tahoe Vista Recreation Area, and the North Tahoe Regional Park in Tahoe Vista. The North Tahoe Event Center is also owned and managed by the District. The District currently serves 5,535 sewer connections and 4,016 metered water connections.

21.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the North Tahoe Public Utility District completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

21.3.1 Outreach Activities

Throughout the planning process, NTPUD actively engaged the community by sharing information about the MJHMP at local events. Outreach included participation in the *Lights in the Sky Drone Show*

on August 29, 2025 and *Back to School Night* at Kings Beach Elementary School on September 11, 2025. These efforts ensured residents were informed and had opportunities to learn about hazard mitigation planning. Targeted outreach was conducted to underserved communities and vulnerable populations through partnerships with organizations such as Sierra Community House, which plays a key role in connecting with Spanish-speaking residents and other at-risk groups in the Kings Beach, Tahoe Vista, and Carnelian Bay areas. Additional outreach efforts are shown in Figure 21-1 and Figure 21-2.

Figure 21-1. Virtual Public Outreach Activities

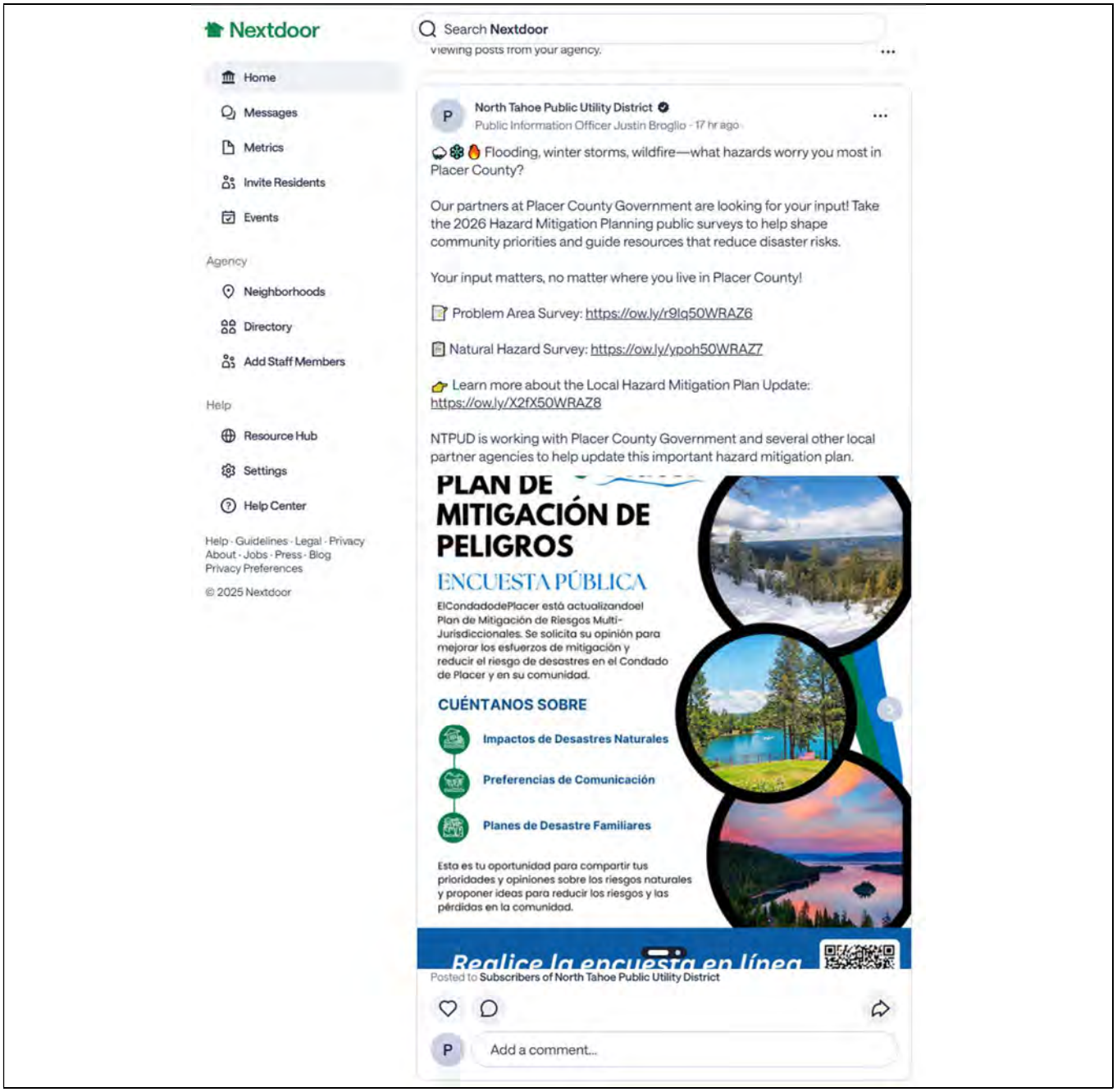
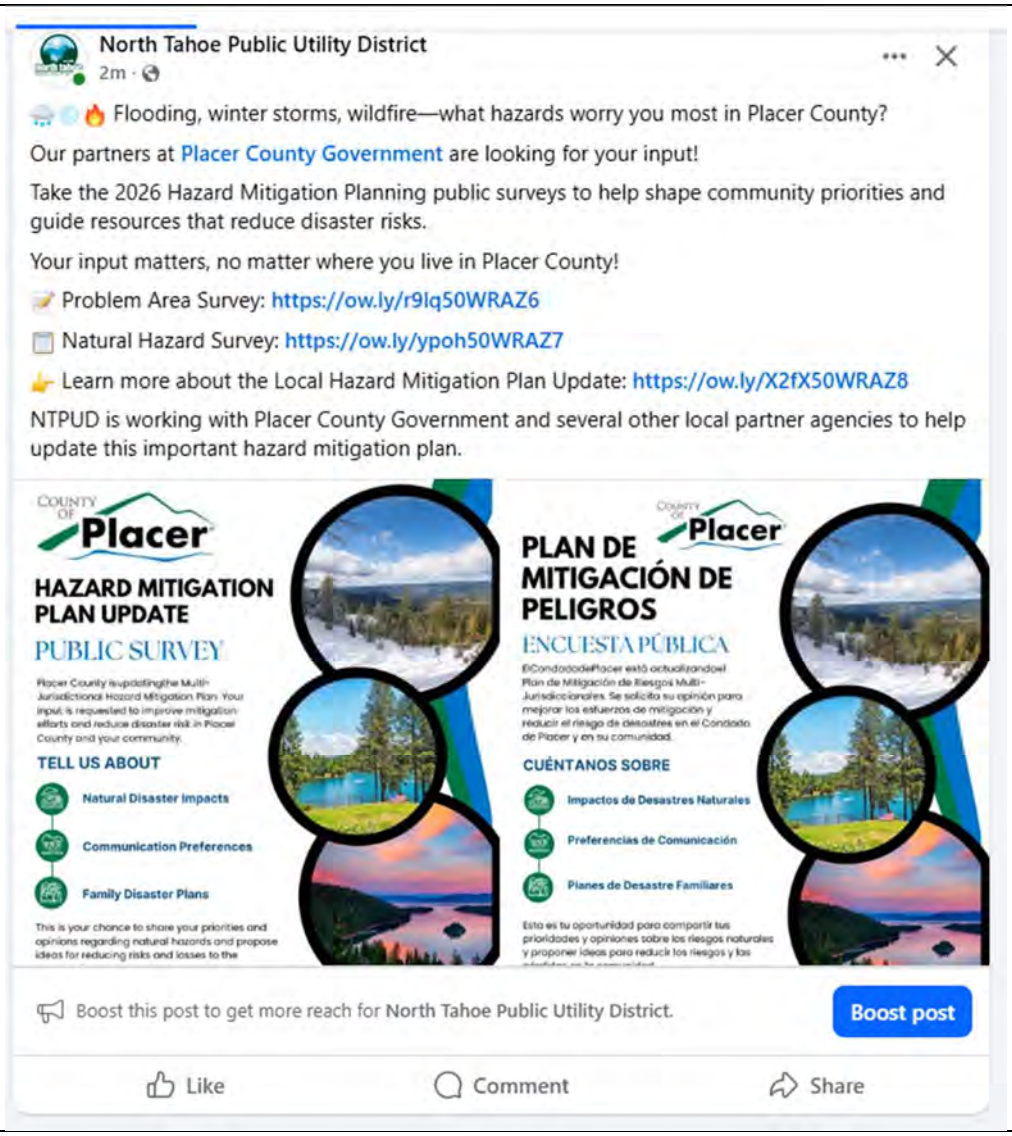


Figure 21-2. Additional Public Outreach Activities



21.3.2 Public Feedback Integration

NTPUD did not receive any public feedback.

21.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

21.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

North Tahoe Fire Protection District is a critical partner agency with the NTPUD. Their agency is participating in the MJHMP update and connected to the protection and fuels management work in and around the District.

- North Tahoe Fire Protection District

21.4.2 Agencies that Have the Authority to Regulate Development

Placer County is a critical planning and regulatory partner with the NTPUD.

- Placer County Community Development Resource Agency
- Tahoe Regional Planning Agency

21.4.3 Neighboring Communities

TCPUD and NTPUD partner and collaborate on numerous District initiatives, water and wastewater utility operations and planning, and emergency coordination.

- Tahoe City Public Utility District

21.4.4 Representatives of Business, Academia, and Other Private Organizations

The NTCA is a funding partner with the NTPUD and supports numerous projects, activities, special events, and community programs.

- North Tahoe Community Alliance
- Boys and Girls Club of North Lake Tahoe

21.4.5 Nonprofit Organizations and Community-Based Organizations

- Sierra Community House
- Boys and Girls Club of North Lake Tahoe

21.5 Jurisdictional Capability Assessment

North Tahoe Public Utility District performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities

- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, North Tahoe Public Utility District lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

21.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 21-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 21-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Water Code **January 1, 2023**	The California Water Code establishes regulations applied to water resources and water service providers in California. Hazard mitigation is addressed in Division 3 (Dams and Reservoirs), Division 5 (Flood Control), Division 6 (Conservation, Development, and Utilization of State Water Resources), and Division 28 (Wildfire Prevention and Recovery Act of 2019).	The District does not have the authority to expand or improve state codes.	California Department of Water Resources
California Public Utilities Code **Division 7** **January 1, 2023**	The California Public Utility District Act is the primary state law enabling the formation, governance, and operation of local public utility districts (PUDs) for providing services like electricity, water, gas, and sewage, especially in unincorporated areas, allowing local control over essential services outside direct CPUC regulation but within the state's framework	The District does not have the authority to expand or improve state codes.	California Public Utilities Commission
California Plumbing Code **January 1, 2022**	The California Plumbing Code (CPC) sets statewide minimum standards for plumbing systems, based on the Uniform Plumbing Code (UPC) but with unique California amendments and additions, covering everything from materials to fixture requirements for health and safety. The Code is integrated in District Ordinances and Technical Specifications.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
Environmental Protection Ordinance(s)	Waste Discharge Requirements - General Order for Sanitary Systems, California Water Quality Control Board	The District does not have the authority to expand or improve state codes	Lahontan Region
Other Code, Ordinance, or Regulation Related to Natural Hazards	NTPUD Sewer & Water Ordinances and Technical Specifications	The District has the ability to expand and improve the plan.	NTPUD Board of Directors

21.5.2 Planning Capability

The MJHMP Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 21-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 21-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Water Master Plan, Updated 1999	Integrated into the Five-Year Strategic Plan and CIP	The District has the ability to expand and improve the plan.	Engineering
Urban Water Management Plan, Updated 2021	Integrated into Water System Operations, Maintenance and Management.	The District has the ability to expand and improve the plan.	Engineering and Operations
Sewer Master Plan, Updated 1991	Integrated into the Five-Year Strategic Plan and CIP	The District has the ability to expand and improve the plan.	Engineering
Sanitary Sewer Management Plan, Updated 2023	Integrated into Sewer System Operations, Maintenance and Management.	The District has the ability to expand and improve the plan.	Engineering and Operations
Sewer Spill Emergency Response Plan, Updated 2023	Integrated into Sewer System Operations, Maintenance and Management.	The District has the ability to expand and improve the plan	Engineering and Operations
Five-Year Strategic Plan, Updated 2023	Integrated into the CIP	The District has the ability to expand and improve the plan.	All NTPUD Departments
Capital Improvement Program (CIP), Updated annually	Integrated into the Five-Year Strategic Plan and annual budget	The District has the ability to expand and improve the plan.	Engineering
Water Shortage Contingency Plan, Updated 2021	Integrated into Water System Operations, Maintenance and Management.	The District has the ability to expand and improve the plan.	Engineering and Operations
Emergency Response Plan, Updated 2022	Integrated into Water and Sewer System Operations, Maintenance and Management.	The District has the ability to expand and improve the plan.	Engineering and Operations

The District's capital improvement program and water management plans are primarily concerned with resilient infrastructure that enables consistent delivery for customers. These documents incorporate hazard-related policies and mitigation priorities related to heavy rainfall, drought, and flood, although the plan are not explicitly integrated with the MJHMP. As the program is updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

21.5.3 Development and Permitting Capability

NTPUD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations, including the Tahoe Regional Planning Agency. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

21.5.4 Administrative and Technical Capability

Table 21-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 21-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
NTPUD Board of Directors	Oversight of District Operations
Maintenance programs to reduce risk of sanitary sewer overflows and uncontrollable water loss	Computerized Maintenance Management System
Emergency Response Mutual Aid Agreement	Agreement with local sewer and water agencies for emergency response aid
CALWARN	Agreement with state sewer and water agencies for emergency response aid

21.5.5 Technical Capability

Table 21-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 21-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Engineers or professionals trained in infrastructure construction practices	Staff availability to support hazard mitigation projects
Engineers with an understanding of natural hazards	Staff availability to support hazard mitigation projects
Staff with expertise or training in benefit/cost analysis	Staff availability to support hazard mitigation projects
Professionals trained in conducting damage assessments	Staff availability to support hazard mitigation projects
Grant Managers and/or Writer(s)	Staff availability to support hazard mitigation projects
GIS Coordinator/Analyst	Staff availability to support hazard mitigation projects

21.5.6 Fiscal Capabilities

Table 21-6 summarizes financial resources available to North Tahoe Public Utility District.

Table 21-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Funds resilient infrastructure projects
User fees for water, sewer, gas, or electric service	Funds operational divisions for maintenance, operations and emergency response
Incur debt through general obligation bonds	Funds resilient infrastructure projects
Other federal or state Funding Programs	Funds resilient infrastructure projects

21.5.7 Education and Outreach Capability

Table 21-7 summarizes the education and outreach resources available to North Tahoe PUD.

Table 21-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Government & Community Affairs Manager
Personnel skilled or trained in website development	Government & Community Affairs Manager
Social media for hazard mitigation education and outreach	Government & Community Affairs Manager
Community newsletter	Government & Community Affairs Manager
Local news	Government & Community Affairs Manager
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Government & Community Affairs Manager

21.5.8 Community Classifications

Table 21-8 summarizes classifications for community programs available to North Tahoe PUD.

Table 21-8. Community Classifications

Program	Participating?	Classification	Date Classified
Tahoe Water Suppliers Association	Yes	-	-
Lake Tahoe Water for Fire Suppression Partnership	Yes	-	-

— = *Unavailable*

21.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 21-9 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 21-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Moderate – The District has redundant water supplies
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Moderate - NTPUD has moderate capacity to respond to Freeze and Snow Events. The District typically receives a considerable amount of snow every winter and have designed infrastructure to withstand these events.
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Weak

21.6 National Flood Insurance Program

North Tahoe Public Utility is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

21.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of North Tahoe PUD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

21.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 21-3 through Figure 21-7. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which North Tahoe PUD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 21-3. Avalanche Hazard Area

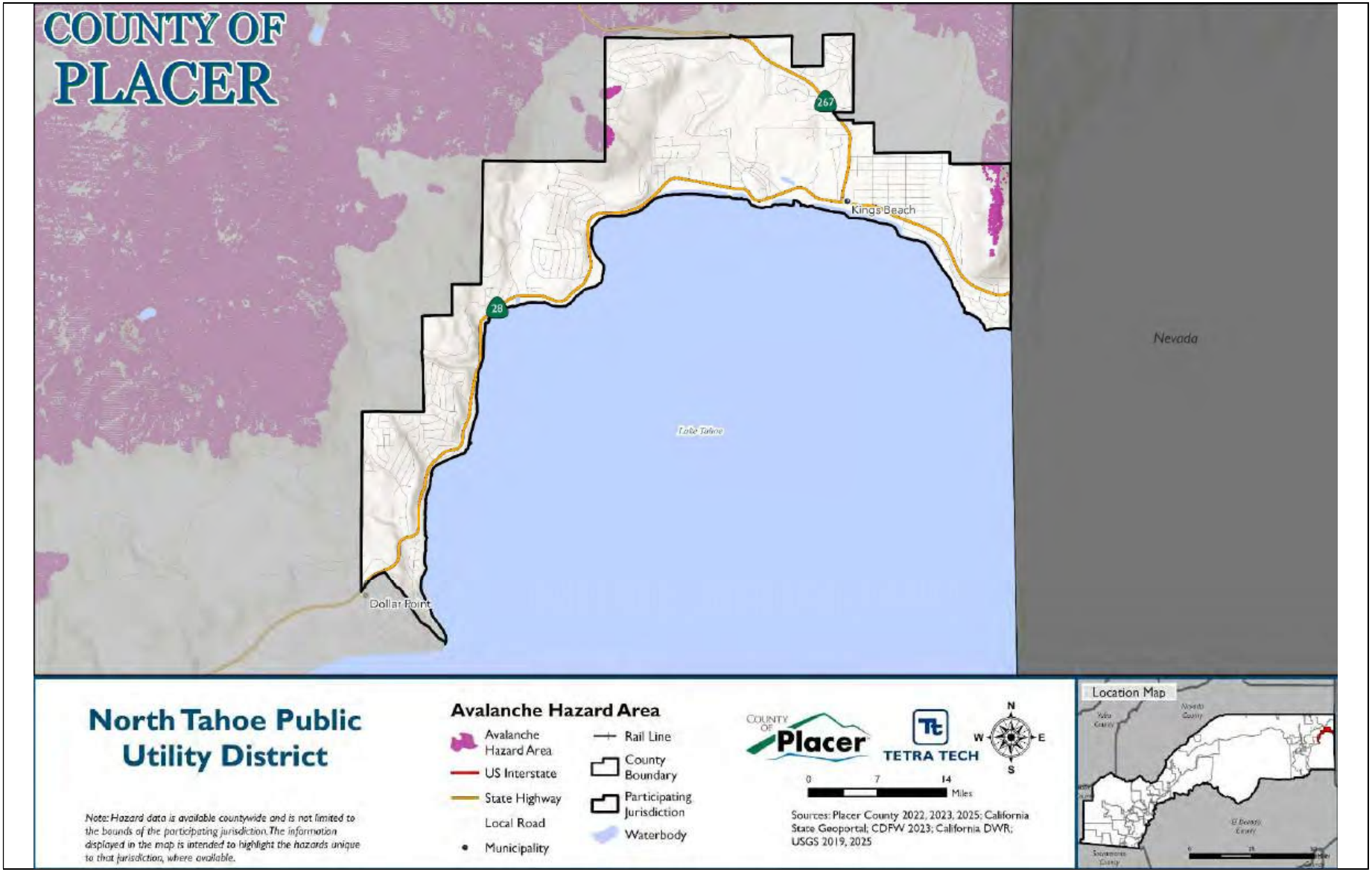


Figure 21-4. Flood Hazard Area

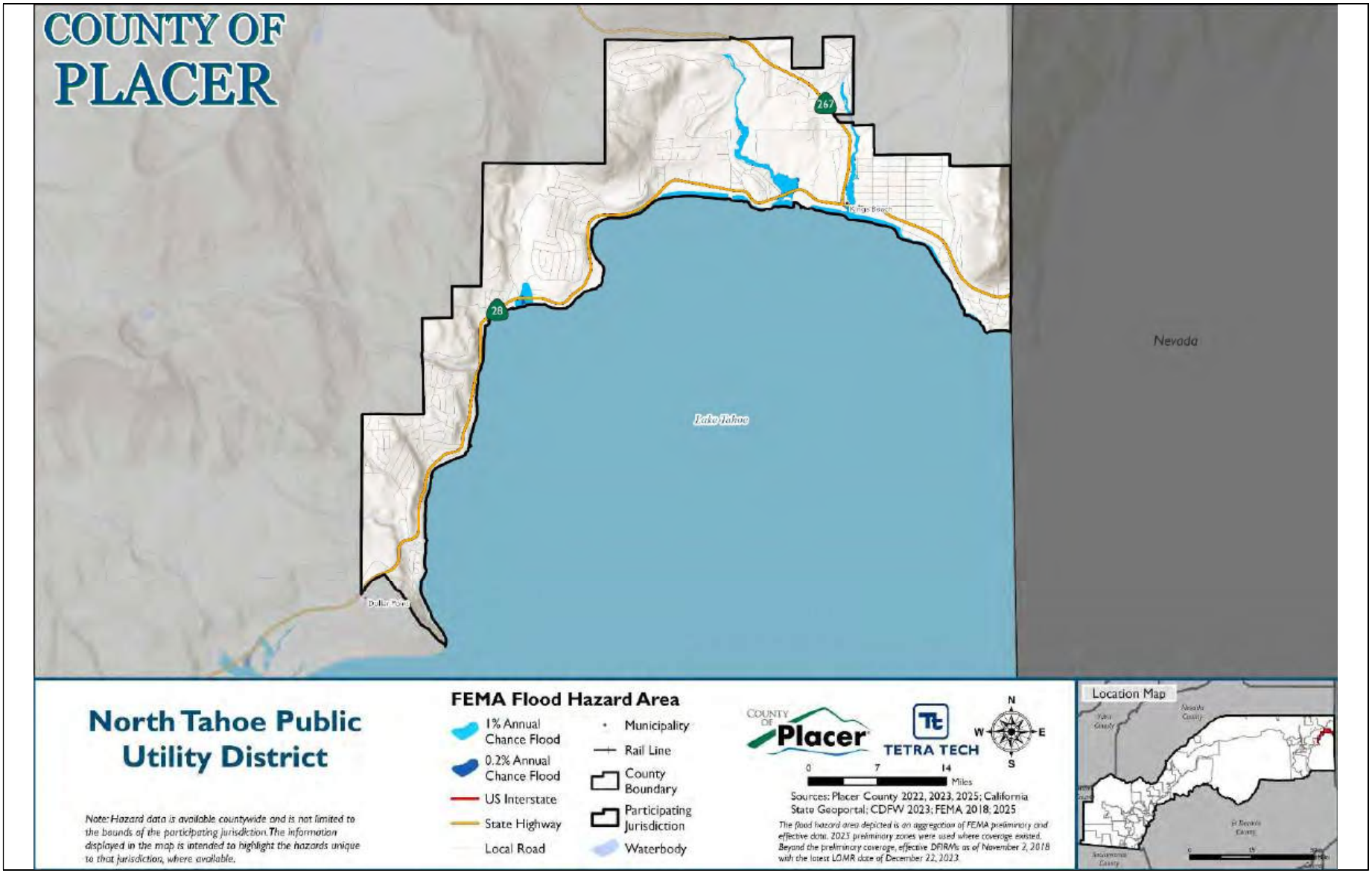


Figure 21-5. Landslide Hazard Area

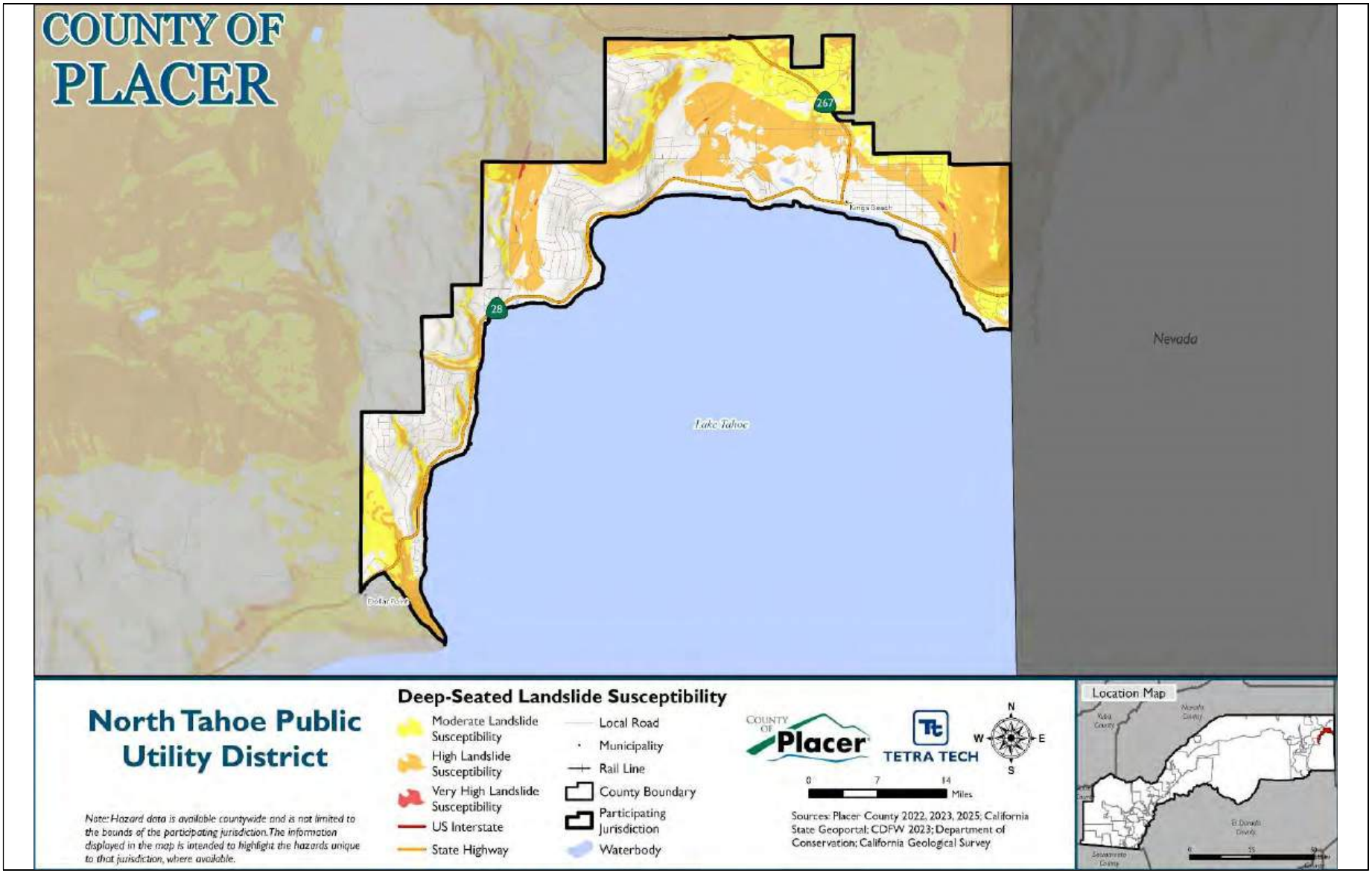


Figure 21-6. NEHRP Soil Class D Hazard Area

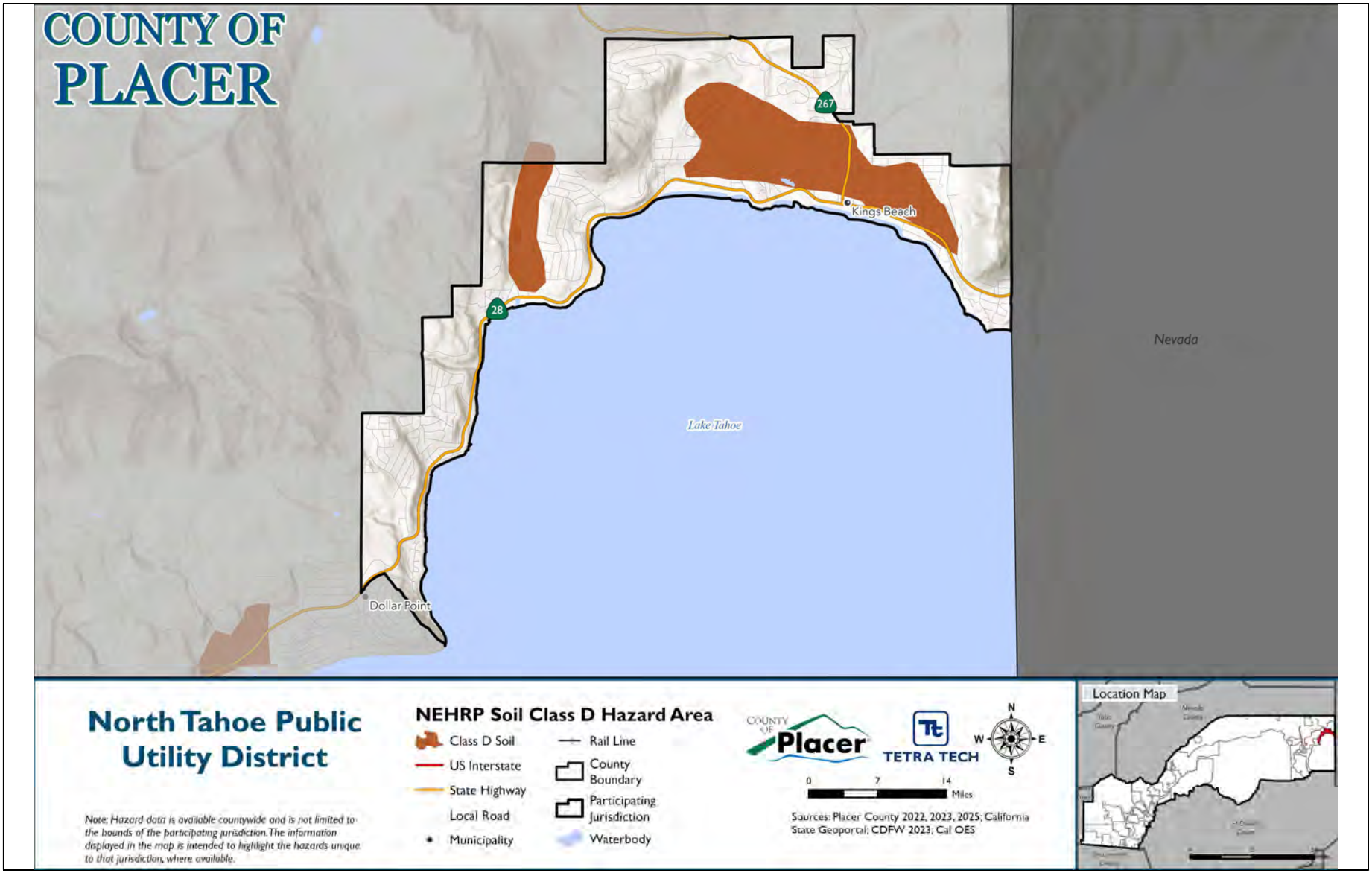
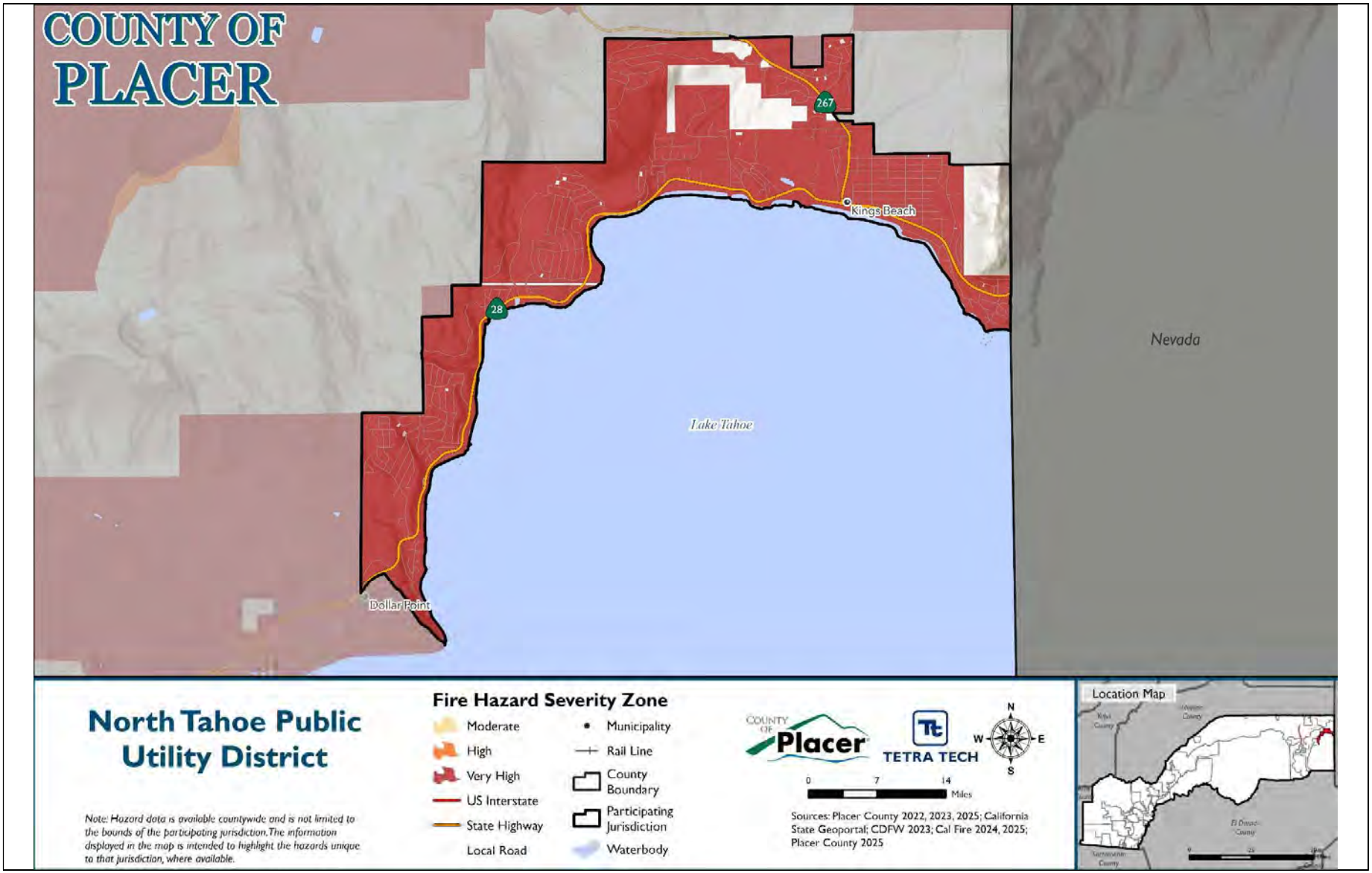


Figure 21-7. Wildfire Hazard Area



21.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of events that have impacted the overall planning area. For the North Tahoe Public Utility District, there are no known hazard events that have caused losses or damage to the District since the last LHMP.

21.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

NTPUD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 21-10 shows North Tahoe Public Utility District's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 21-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

21.7.4 Vulnerability Assessment

Table 21-11 lists issues related to the top hazards of concern for North Tahoe PUD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 21-11. Hazard Issues

Issue	Related Hazards
Dry vegetation and dead trees on District land can fuel wildfires and become projectiles during heavy rains, high winds, landslides, or avalanches.	Avalanche, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
As a water system, the District's infrastructure provides a critical service to the community. However, the infrastructure is not hardened against damage from natural hazard events.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flows, Wildfire
The District has lost power during prior natural hazard events, leading to utility service impacts	Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Existing sewer infrastructure is vulnerable to leakage from flood and heavy rain events, and damage from wildfires.	Earthquake, Flood, Landslides Mudslides and Debris Flows, Heavy Rains and Storms, Wildfire
Water systems are a known target for cyber terrorists seeking to disrupt social cohesion and that risk is higher during natural hazard events.	Earthquake, Flood Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Existing District infrastructure is vulnerable to displacement and breakage during seismic ground shaking.	Earthquake

21.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 21-12 describes the potential impacts of the hazards of local concern to North Tahoe PUD (hazards identified as medium or high risk in Table 21-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 21-12. Hazard Impacts

Hazard	Potential Impacts
Landslides, Mudslides, and Debris Flow	Heavy rains and unstable slopes can trigger landslides, mudslides, and debris flows, which may damage District water tanks and pumping stations and obstruct access routes to these facilities. Uprooted trees and debris can impact water and sewer systems by damaging buried pipeline, leading to service interruptions and potential contamination. These events also pose safety hazards for crews and residents, requiring rapid response and coordination.
Wildfire	Dry vegetation and dead trees on District land significantly increase wildfire risk, particularly near populated areas and critical infrastructure including water tanks and pumping stations. A wildfire could damage water and sewer reservoirs and pumping stations, disrupt service delivery, and compromise public safety. Power loss during such events may further interrupt water supply, while heightened demand for emergency response strains resources.

21.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect North Tahoe PUD's overall vulnerability since the previous plan was approved.

21.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

21.8.1 Changes in Community Priorities

The District is prioritizing measures that enhance resilience and reliability of essential services. Key areas of focus include reducing wildfire risk through proactive vegetation management, strengthening critical infrastructure to withstand natural hazards, and ensuring continuity of operations during power outages. The District is also committed to improving system capacity and reliability for water and wastewater services, while addressing emerging threats such as cybersecurity vulnerabilities. Additionally, efforts to evaluate and retrofit infrastructure for seismic safety reflect a comprehensive approach to protecting public health, safety, and service delivery in the face of diverse hazards.

21.8.2 Past Mitigation Action Status

Table 21-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 21-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	Project includes electrical and civil design, permitting, and construction of backup generators and transfers switches.	Backup Generator Installation at Critical Facilities	Not Complete	Yes	
2	Identify hazards, design, permitting, and construction (vegetation and tree removal).	Fuels Reduction around Critical Infrastructure and Access Roads, and within the North Tahoe Regional Park	Not Complete	Yes	
3	This project proposes to rebuild approximately 10,000 lineal feet of water mains and install 20 fire hydrants in the two water systems.	Increased Fireflow Capacity and Reliability for Dollar Cove and Carnelian Water Systems	Not Complete	No	Combine with other water projects
4	Analysis of IT and OT through master planning and assessments through the Department of Homeland Security and the American Water Works association Cybersecurity Guidance Tool.	Cybersecurity Assessment and Improvements	Not Complete	Yes	
5	Project includes seismic analysis of critical facilities, design, permitting, and construction.	Seismic Analysis and Retrofit of Critical Infrastructure	Not Complete	Yes	
6	Project includes property acquisition, design, permitting, and construction of new sewer mains and underground storage structures in the public right of way, relocation and reconnection of existing services, and abandonment of facilities.	Sewer Main Replacements in Shorezone of Lake Tahoe	Not Complete	Yes	
7	This project would include design, permitting, and construction to rehabilitate the existing wooden structures using fire resistant materials or replacing the wooden structures with either underground booster stations or concrete buildings.	Water Booster Pump Station Rehabilitation/ Replacement	Not Complete	No	Combine with other water projects
8	This project would either install intertie connections between water systems, or install larger diameter water mains (12-14 inches) in the State highway, or a combination of the two. Scope includes analysis, design, permitting, and construction of the selected approach.	Water System Interties	Not Complete	No	Combine with other water projects

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
9	The integration of power disruption mitigation measures into this planned infrastructure project will provide tangible benefits to the community and its public works staff. This generator project will reduce Emergency Shelter and Evacuation Shelter downtime resulting from power failure by reducing the risks associated with planned and unplanned events. Without an Emergency Generator and appurtenances, the North Tahoe Event Center cannot operate as an Emergency Shelter or Evacuation Center during power outages, leaving the North Tahoe community at risk of traveling longer distances to an alternative shelter that has power, potentially causing over-crowded road and shelter conditions and loss of life. Mitigation is most effective when it is part of the local community planning process and resilience by adapting to changing conditions and prepare for, withstand, and rapidly recover from disruption. This plan will allow for local jurisdictions to adapt, cooperate, and recover from multiple hazards. This project includes the installation of a complete UL 2200 listed, prototype tested, series produced 130kW Natural Gas generator set in a Level 2 acoustic locking weather enclosure, on site, as installed (no altitude derating) with engineered seismically-adequate reinforced concrete support pad and all conduit and wiring, with on-site load bank testing and startup services by vendor. It will provide all standard accessories including battery charger, Automatic Transfer Switch, block heater, battery charger, battery warming pads, protective traffic bollards. Approximate dimensions for generator is 12' L x 3' 6" W x 6' 6" H. There is adequate, paved areas that will be used for construction staging and parking. Water use will not be necessary as part of this project.	Joint Grant Application with North Tahoe Public Utility District (NTPUD) for an Emergency Back-up Generator System at the North Tahoe Event Center (NTEC) located at 8318 North Lake Blvd, Kings Beach, CA 96143.	Not Complete	No	In construction; work will be completed in early 2026
10	This project proposes to rebuild approximately 15,000 lineal feet of water mains and install 30 fire hydrants and all new water services and meters to the properties served.	Kings Beach Grid Watermain Replacement and Fire Hydrant Installation Project	Not Complete	No	Combine with other water projects
11	This project proposes to rebuild approximately 5,000 lineal feet of water mains and install 12 fire hydrants and all new water services and meters to the properties served.	NTPUD Water System Infill and Fire Suppression Improvements Project	Not Complete	No	Combine with other water projects

21.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, North Tahoe PUD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Sewer pump station replacements to improve reliability.
- Watermain installation for fire suppression, improved network looping and improved reliability
- Installation of standby generators to improve water and sewer system reliability during loss of commercial power

21.8.4 Hazards Omitted from Mitigation Strategy

All hazards of concern were listed in NTPUD's mitigation strategy; no hazards were omitted.

21.8.5 Mitigation Actions Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that North Tahoe PUD would like to pursue in the future to reduce the risk from hazards.

Table 21-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 21-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	X	-	-
Dam and Levee Failure	-	X	-	-
Drought and Water Shortage	-	X	-	-
Earthquake	-	X	-	-
Flood	-	X	-	-
Freeze and Snow	-	X	-	-
Heavy Rains and Storms	-	X	-	-
High Winds and Tornadoes	-	X	-	-
Landslides, Mudslides, and Debris Flows	-	X	-	-
Wildfire	-	X	-	-

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 21-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 21-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
NTPUD-01	Hazardous Fuels Reduction	9	1-10 Years	High	Medium	8.25	High
NTPUD-02	Water System Hardening	9	1-10 Years	High	High	7.25	Medium
NTPUD-03	Generator Installation at Critical Facilities	8	1-10 Years	High	High	7	Medium
NTPUD-04	Sanitary Sewer System Expansion	8	1-10 Years	High	High	7	Medium

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
NTPUD-05	Cybersecurity Assessment and Hardening	7	1-10 Years	High	High	6.75	Medium
NTPUD-06	Seismic Analysis and Retrofit	7	1-10 Years	High	High	6.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

21.8.6 Mitigation Strategy

Table 21-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The North Tahoe PUD Planning and Engineering Department will lead implementation of all projects listed in Table 21-16. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 21-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
NTPUD-01	Hazardous Fuels Reduction	Remove hazardous trees and vegetation in the District. The project includes, but is not limited to, identification of the hazardous vegetation, preparation of a removal or mitigation plan, permitting, and construction (vegetation and tree removal).	Avalanche, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	North Tahoe Fire Protection District, Placer County Office of Emergency Services	General Fund, Staff Time, CAL FIRE Wildfire Resilience Grants, FEMA Hazard Mitigation Grant Program
NTPUD-02	Water System Hardening	Expand the capacity and level of protection provided by District water infrastructure. The project includes, but is not limited to, the design, permitting, and construction of water mains, fire hydrants, water services, system interties, booster pump stations, meters, and other appurtenances to harden North Tahoe Public Utility District's infrastructure from potential hazards.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flows, Wildfire	California Department of Water Resources, Placer County Office of Emergency Services	General Fund, Staff Time, California Department of Water Resources Grant and Loan Programs
NTPUD-03	Generator Installation at Critical Facilities	Installation of backup power generators and associated equipment. The project includes, but is not limited to, electrical and civil design, permitting, and construction at critical infrastructure.	Earthquake, Flood Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Placer County Office of Emergency Services	General Fund, Staff Time, FEMA Hazard Mitigation Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
NTPUD-04	Sanitary Sewer System Expansion	Expand the capacity and level of protection provided by District sewer infrastructure. The project includes, but is not limited to, property acquisition, design, permitting, and construction of sewer mains and underground storage structures, relocation and reconnection of existing services, and abandonment of facilities to harden North Tahoe Public Utility District's infrastructure from potential hazards.	Earthquake, Flood, Landslides Mudslides and Debris Flows, Heavy Rains and Storms, Wildfire	Placer County Office of Emergency Services	General Fund, Staff Time, FEMA Hazard Mitigation Grant Program
NTPUD-05	Cybersecurity Assessment and Hardening	Harden Information Technology (IT) and Operational Technology (OT) systems. Project includes analysis of IT and OT through master planning and assessments through the Department of Homeland Security and the American Water Works association Cybersecurity Guidance Tool. Recommendations would be implemented to strengthen North Tahoe Public Utility's infrastructure	Earthquake, Flood Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Department of Homeland Security, Placer County Office of Emergency Services	General Fund, Staff Time, FEMA Hazard Mitigation Grant Program
NTPUD-06	Seismic Analysis and Retrofit	Conduct a seismic analysis and retrofit of critical facilities. The project includes, but is not limited to, seismic analysis, design, permitting, and construction to ensure the infrastructure is serviceable after seismic events.	Earthquake	Placer County Office of Emergency Services	General Fund, Staff Time, FEMA Hazard Mitigation Grant Program

22. Northstar Community Services District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Northstar Community Services District (NCSD) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of NCSD, and describes who participated in the planning process, assesses NCSD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Countywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to NCSD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

22.1 Hazard Mitigation Planning Team

NCSD identified MJHMP points of contact and developed this annex over the course of several months. The following MCSD staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Russell Grant, Engineer/Paramedic

Address: 900 Northstar Drive, Truckee, CA 96161

Phone Number: 530-318-0808

Email: RGrant@northstarcsd.org

Alternate Point of Contact: Eric Martin, Director of Public Works

Address: 900 Northstar Drive, Truckee, CA 96161

Phone Number: 530-562-0747

Email: ericm@northstarcsd.org

The Engineering Department represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 22-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 22-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Russel Grant	Fire	Engineer/Paramedic	Primary point of contact for plan development
Mike Geary	Administration	General Manager	Contributed to worksheets, reviewed draft documents
Eric Martin	Engineering	Director of Public Works	Contributed to worksheets, reviewed draft documents
Shaun Evans	Utilities	Utility Operations Supervisor	Contributed to worksheets, reviewed draft documents

22.2 Community Profile

Established in 1990 under Government Code 61600, NCSD serves as a local government entity dedicated to providing essential services to the Northstar community. NCSD delivers a wide range of services, including water and sewer collection, solid waste management and recycling, fire protection, fuels management, snow removal, road maintenance, and trail construction and upkeep. These services are funded through user fees for water, sewer, and solid waste, as well as property and parcel taxes.

In 2015, NCSD expanded its service area by acquiring full ownership and operation of the Martis Valley Water System after six years of contracted management. This acquisition extended water service to the Lahontan, Martis Camp, Schaffer's Mill, and Hopkins Village communities, strengthening NCSD's role in regional infrastructure.

Governance is provided by a five-member elected Board of Directors, composed of registered voters from the communities served. The Board sets policy and provides leadership, while day-to-day operations are managed by a board-appointed General Manager (Northstar Community Services District 2025).

22.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, NCSD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders NCSD serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

22.3.1 Outreach Activities

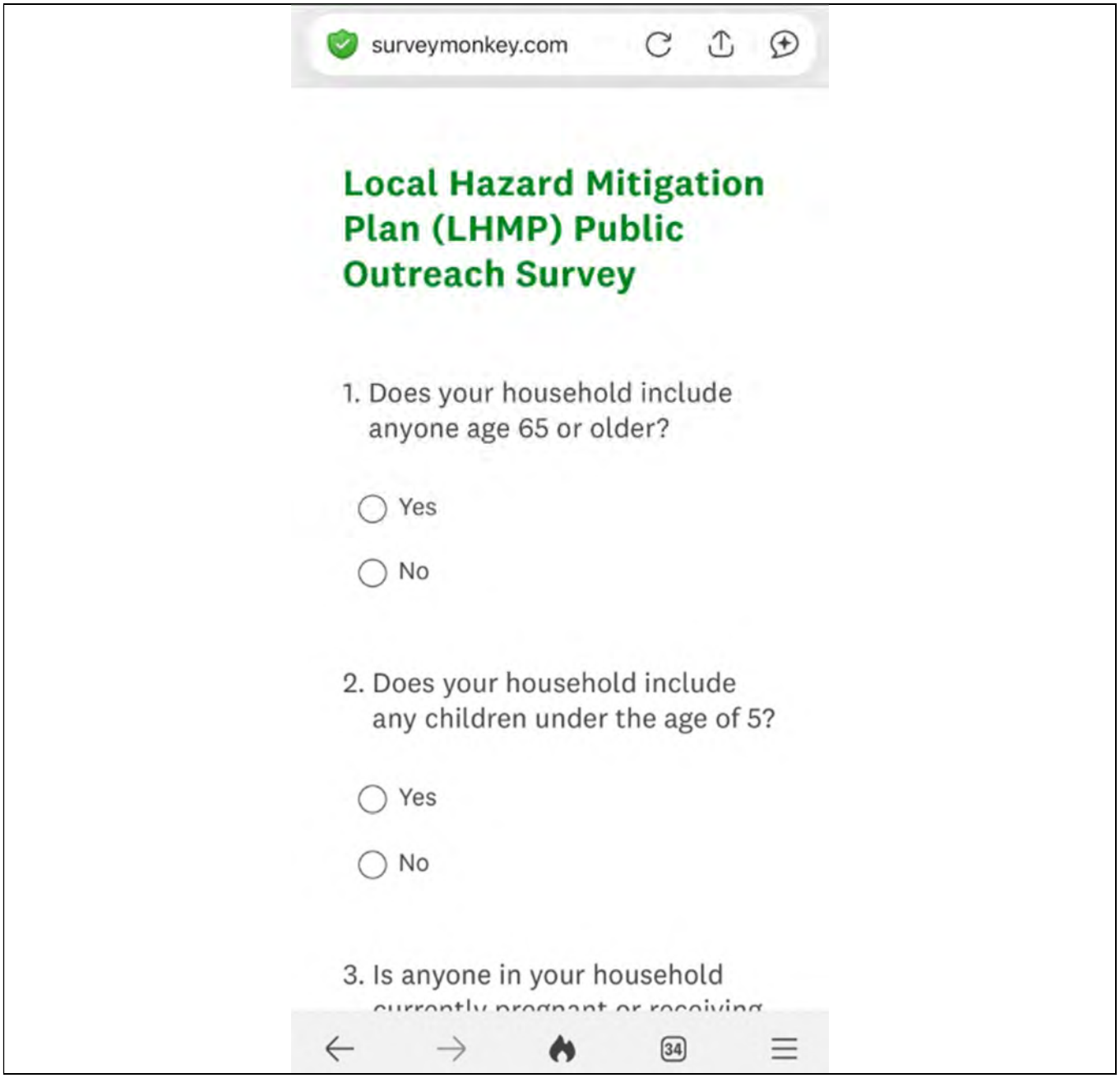
NCSD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

In addition to the countywide hazard mitigation public survey, NCSD developed a separate survey for residents to obtain hyper-local information relevant to the community. NCSD also distributed posted MJHMP information on their public notice bulletin board and the recreation center bulletin board. NCSD's public outreach efforts are illustrated in Figure 22-1 through Figure 22-3.

Figure 22-1. Virtual Public Outreach Activities

Figure 22-2. Additional Public Outreach Activities

Figure 22-3. Survey



22.3.2 Public Feedback Integration

Although NCSD did not receive direct feedback from residents, county-level outreach identified wildfire, power outages, and evacuation limitations as the most significant regional concerns. These themes align with hazards faced within the Northstar community. To reflect shared priorities, NCSD incorporated regional feedback into its annex and designed mitigation actions, such as wildfire prevention, backup power planning, and community risk reduction education, to address these issues and strengthen resilience.

NCSD conducted both the countywide Hazard Mitigation Plan public survey and a Northstar-specific community survey to gather localized input on hazard risks and mitigation priorities. Despite multiple outreach efforts, no survey responses were received from the Northstar community. As a result, no changes were made to hazard rankings or mitigation priorities based on public input. NCSD relied on historical incident data, hazard mapping, and operational experience to confirm local risk conditions and planning priorities.

22.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

22.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- Town of Truckee
- Truckee Fire Protection District

22.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- Placer County

22.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the NCSD service area.

- Northstar
- Martis Camp
- Schaffer's Mill
- Lahontan
- Hopkins Village
- Meadow View Place

22.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the NCSD service area.

- Northstar California Resort
- Tahoe Truckee Unified School District

22.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the NCSD service area.

- Tahoe Mountain Resorts Foundation
- Tahoe Truckee Community Foundation
- Tahoe Fund,
- Sierra Business Council
- Truckee River Watershed Council
- North Tahoe Community Alliance

22.5 Jurisdictional Capability Assessment

NCSD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an

opportunity for Placer County to identify opportunities for integrating mitigation concepts into ongoing NCSD procedures.

As a special district, NCSD lacks some of the regulatory capabilities that are available to municipalities. Specifically, NCSD has no authority over land use permitting; however, NCSD does have permitting authority over fire, water, sewer, solid waste, trails etc. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

22.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 22-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 22-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Building Code (CA Building & Fire Code – Title 24)	Mitigates hazards through structural, seismic, fire, and flood safety requirements. Explicitly addresses natural hazards such as earthquakes, wildfire, and flooding. Establishes resilience standards through construction and design regulations. NCSD enforces the 2019 CA Fire/Building Code with locally adopted amendments based on climatic, geological, and topographical conditions within district boundaries.	Continue to adopt current CA Building & Fire Code cycles. Expand collaboration with Placer County Building Department to strengthen WUI enforcement, defensible space requirements, and ignition-resistant construction standards	Placer County Building Department (code enforcement); NCSD Fire Department (plan review, inspection, fire code enforcement).
NCSD Local ordinance 38-22	Zone 0 Implementation within the District boundary.	Example: NCSD's ordinance has more stringent requirements for defensible space than the State of CA.	NCSD

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Water Code **January 1, 2023**	The California Water Code establishes regulations applied to water resources and water service providers in California. Hazard mitigation is addressed in Division 3 (Dams and Reservoirs), Division 5 (Flood Control), Division 6 (Conservation, Development, and Utilization of State Water Resources), and Division 28 (Wildfire Prevention and Recovery Act of 2019).	NCSD has the authority to expand or improve state codes via water ordinance adoption.	California Department of Water Resources; NCSD
Zoning/Land Use Code	Mitigates hazards by guiding development away from floodplains, slopes, and wildfire hazard zones. Placer County zoning ordinance regulates WUI overlays, wetlands, floodways, and floodplains. NCSD provides fire input during development review.	No local authority to expand or improve. Coordination with Placer County would be required for changes.	Placer County CDRA – Planning Services Division (lead); NCSD as reviewing agency.
Subdivision Code	Requires secondary access, water supply, drainage, and infrastructure that support safe evacuation and emergency response in new developments.	Advocate for stronger defensible space requirements, enforceable HOA maintenance agreements, and legal mechanisms (CC&Rs, bonds) to ensure long-term upkeep of mitigation measures.	Placer County Planning Commission, Public Works, Board of Supervisors (approval authority); NCSD reviews for fire compliance.
Site Review Code	Governs grading, drainage, and development siting to minimize flood, erosion, and slope hazards. NCSD participates in plan review for fire flow, access, and defensible space.	Require standardized fire conditions of approval (addressing, access, hydrant locations), integrate evacuation planning into site review, and streamline checklist-based reviews.	Placer County CDRA – NCSD as commenting agency.
Stormwater Management Code or Program	Requires BMPs for runoff control, pollution prevention, and post-development hydrology, reducing localized flooding and protecting emergency access routes.	Advocate for post-fire runoff planning, resilient drainage for emergency access, and dual-use water features that can support firefighting.	Placer County storm water Quality Division / Flood Control District.
Erosion/Sediment Control Program	Requires erosion-control plans to stabilize disturbed soils and prevent debris flows that could block evacuation routes.	Push for stronger post-fire BMPs, especially in WUI areas, and improved enforcement of construction-phase erosion controls.	Placer County and Lahontan Regional Water Quality Control Board Authority
Post-Disaster Recovery/ Reconstruction Code	Provides framework for safe, resilient rebuilding after disasters. Placer County integrates mitigation goals into recovery planning.	Encourage use of fire-resistant materials, defensible space re-establishment, and upgraded access/water supply standards during rebuilds.	Placer County OES / CDRA – NCSD provides fire damage assessments and recovery input.

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Real Estate Disclosure	Requires disclosure of flood, seismic, and fire hazard zones to property buyers, improving public risk awareness.	Work with County to include WUI compliance status, evacuation constraints, and defensible space records in property reports.	California Civil Code, Dept. of Real Estate, Placer County Assessor; NCSD can provide inspection data.
Growth Management Ordinance	Controls location, pace, and character of growth, indirectly reducing exposure by limiting development in hazard-prone areas.	Tie growth approvals to hazard mitigation standards (evacuation capacity, fire flow, defensible space, safe siting).	Placer County Planning Services Division & CDRA; NCSD provides hazard input.
Environmental Protection Ordinance(s)	Support resilience by protecting wetlands, riparian zones, and sensitive habitats that buffer floods and erosion.	Advocate for integrating vegetation management, defensible space, and slope stability protections into these ordinances.	Placer County CDRA & Planning Services Division; NCSD provides wildfire mitigation perspective.
Wellhead Protection	Protects groundwater sources from contamination; supports resilience by maintaining potable water supplies post-disaster.	Advocate for buffer zones free of hazardous storage, integrate fire suppression water planning with groundwater protection.	Placer County and State Water Resources Control Board – Division of Drinking Water Authority
Emergency Management Ordinance	Requires local EOP, hazard identification, and critical facility siting outside high-risk areas.	Strengthen links between EOP updates and LHMP mitigation actions; integrate evacuation and sheltering triggers for wildfire and flood events.	Placer County OES, Board of Supervisors; NCSD contributes to EOP updates.
Climate Change Ordinance	Recognizes hazards like drought, wildfire, and flooding; sets adaptation and resilience goals.	Tie adaptation policies to enforceable codes (e.g., WUI hardening, green infrastructure, water conservation).	Placer County CDRA, Board of Supervisors; NCSD provides operational risk input.
Open Space and Conservation Program	Protects riparian corridors, wetlands, and habitat buffers, indirectly supporting wildfire and flood resilience.	Advocate for using greenbelts as defensible space zones, integrate open space into evacuation and fire-break planning.	Placer County Conservation Authority / PCCP; NCSD provides wildfire risk data.
Other Code, Ordinance, or Regulation Related to Natural Hazards	Includes seismic, snow-load, and WUI regulations in Building Code, General Plan Safety Element, and Fire Hazard Severity Zone regulations.	Advocate for regular updates that address emerging risks (e.g., debris flow mapping, evacuation road standards, landslide hazard overlays).	Placer County CDRA, Board of Supervisors; NCSD ensures fire-related standards are enforced. NCSD has both water and sewer ordinances governing local requirements for infrastructure installation

22.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 22-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 22-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Placer County General Plan – Safety & Health Element	Identifies wildfire, flood, and seismic hazards; sets resilience standards through land use, infrastructure, and safety policies. The 2021 MJHMP is integrated with the General Plan.	Integrate NCSD fire maps, WUI standards, and hazard-mitigation funding priorities to align growth with fire protection capacity.	Placer County Authority
NCSD Capital Replacement Plan	Provides funding objectives for replacement/capital maintenance of all NCSD assets including fleet, facilities and infrastructure. Plan includes 100-yr models for each service fund including Fire, Water, Sewer, Solid Waste, Snow Removal, and Roads. Supports hazard mitigation by funding evacuation and response capacity improvements.	Elevate secondary access, fire station hardening, and water supply upgrades as top CRP priorities linked to LHMP actions.	NCSD Board of Directors & Engineering Dept.
Northstar Resort Habitat Management Plan (ND)	Identifies habitat areas and sensitive ecosystems across resort property; informs fuels management and guides development to avoid critical areas. Supports hazard mitigation by maintaining natural buffers and riparian zones that reduce flood and erosion risk.	Continue integrating NCSD fuels projects and defensible-space corridors into resort habitat management efforts; coordinate annual updates so wildfire treatments align with conservation requirements.	Placer County CDRA – Planning Services Division (county oversight); Vail Resorts – Northstar California Environmental/Fuels Management Dept.
Spill Prevention, Control, and Countermeasure Plan and Emergency Response Plan	Supports spill response and all-hazards incident management. These plans outline notification procedures, response protocols, and coordination mechanisms and may be referenced or integrated into local response operations during emergencies affecting resort property.	Enhance planning capability by strengthening plan integration, improving interagency coordination, and maintaining regular updates through training and exercises.	Northstar California Resort
Community Wildfire Protection Plan Truckee / NCSD Regional CWPP (updated 2022)	Identifies priority fuels projects, defensible space, and evacuation treatments. Both plans are integrated with the 2021 MJHMP.	Align CWPP projects annually with LHMP action plan; pursue sustainable funding for maintenance.	Northstar Fire, CAL FIRE NEU, Truckee Fire Protection District
NCSD Community Forest & Biomass Management Program (emerging program – 2024/2025)	Supports wildfire risk reduction through fuels management, community chipping/green waste disposal, and biomass utilization. The community heating project creates a sustainable outlet for biomass, incentivizing fuel reduction and reducing open burning, which mitigates wildfire ignition risk and improves air quality.	Develop a formal Community Forest Management Plan that inventories NCSD-managed lands, sets treatment priorities (thinning, shaded fuel breaks), integrates CWPP/LHMP projects, and creates long-term funding mechanisms. Expand biomass-to-energy initiatives to include additional neighborhoods and facilities.	NCSD – Fuels Management & Fire Department (lead) in coordination with Placer County RCD and CAL FIRE NEU
Emergency Operations Plan	Coordinates response, evacuation, sheltering; identifies major hazards.	Add cross-references to LHMP projects and NCSD priorities (fuel breaks, preplans).	Placer County OES

Name of Plan	Integration	Expand and Improve	Department Responsible
Substantial Damage Response Plan	Expedites safety inspections and rebuild decisions.	Include defensible space re-establishment and ignition-resistant construction requirements in post-disaster rebuild protocols.	Placer County Authority
Threat & Hazard Identification & Risk Assessment (THIRA)	Identifies priority threats including wildfire, flood, and severe weather. NCSD uses FLAMMAP modeling and ground reconnaissance to prioritize fuels treatments and align mitigation actions with capability gaps identified in the THIRA.	Expand to include NCSD-specific evacuation modeling and treatment effectiveness monitoring; ensure County THIRA explicitly accounts for resort visitor surges and constrained access routes in Northstar.	Placer County Office of Emergency Services (lead); NCSD Fire & Fuels Management Division (data contributor)
Res A Dam Emergency Action Plan (2021) and Emergency Evacuation Plan	Identifies inundation zones and outlines notification, warning, and evacuation procedures for dam failure scenarios. Directly supports hazard mitigation by reducing life-safety risk and ensuring coordinated evacuation.	Integrate EAP evacuation routes with NCSD pre-incident planning, tabletop exercises, and GIS layers. Conduct joint annual drills with dam operators and Placer County OES to validate notification and evacuation timing.	Placer County Authority NCSD

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

22.5.3 Development and Permitting Capability

NCSD is a special district located in Placer County. NCSD is subject to the Placer County and State of California building codes and land use regulations. NCSD does not permit or regulate development. Development permits within NCSD's jurisdiction are issued through Placer County.

22.5.4 Administrative Capability

Table 22-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts.

Table 22-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Public Works/Highway Department	The NCSD Utilities Dept. provides road care, snow removal, water and sewer system operations and maintenance within Northstar. Water system operations and maintenance is also provided within Martis Camp, Schaffer's Mill, Lahontan, and Hopkins Village communities.
Construction/Building/Code Enforcement Department	NCSD enforces Water and Sewer Ordinances with construction standards.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	The NCSD Utilities Dept. oversees maintenance of a dam for a water storage reservoir in accordance with State requirements.
Mutual aid agreements	The NCSD Fire Department holds mutual aid agreements with neighboring Fire Districts.

22.5.5 Technical Capability

Table 22-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 22-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Engineers or professionals trained in building or infrastructure construction practices	NCSD's Director of Public Works holds a California Professional Engineer license and can assist with expertise in hazard mitigation efforts.
Registered CSFM Fire Marshall	NCSD Fire Chief is a registered California State Fire Marshall with the ability to conduct detailed building and fire safety inspections; recommend the proper design and installation of fire protection equipment; enforce fire safety standards in the construction, operation, and maintenance of various types of occupancies as specified in Title 19 and 24 of the California Administrative Code,
Planners or engineers with an understanding of natural hazards	NCSD's Director of Public Works holds California Professional Engineer license and understands natural hazards.
Professionals trained in conducting damage assessments	Forester performs damage assessments to forest stands and forest health.
Grant Managers and/or Writer(s)	The NCSD Fuels Management Dept. staff manages and writes wildfire/forest health grants. Director of Public Works regularly prepares grant applications for public works development projects. The Fire Department staff collaborate with adjoining agencies for federal grant applications.

22.5.6 Fiscal Capabilities

Table 22-6 summarizes financial resources available to NCSD.

Table 22-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Currently in development of a Wood Energy Facility to process fuels management project residuals to provide a much needed outlet for this material which will allow for increased scope and scale of forest thinning projects.
Authority to levy taxes for specific purposes	NCSD recently passed Measure U funding the Fuels Management Program for 10-years within the community.
User fees for water, sewer, gas, or electric service	NCSD sets rates approximately every 5-years through a Proposition 218 process for water, sewer and solid waste service.
Impact fees for homebuyers or developers of new development/homes	The NCSD Fire Dept. assesses impact fees for new construction within the community.
Other federal or state Funding Programs	NCSD applies for state and federal grants (FEMA HMGP/BRIC, CAL FIRE Climate Investment grants/state responsibility area, etc.) and has received funding for water/sewer projects and trail development.

22.5.7 Education and Outreach Capability

Table 22-7 summarizes the education and outreach resources available to NCSD.

Table 22-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	NCSD Fire Chief assigns multiple firefighters to serve as PIOs, providing incident updates, mitigation messaging, and public safety information. Program could be improved by formalizing PIO training (e.g., FEMA IS-29) and developing pre-scripted hazard messaging for wildfire, flood, and evacuation scenarios.
Personnel skilled or trained in website development	NCSD employs a dedicated IT manager who manages the District's website, ensures ADA compliance, and posts hazard mitigation resources. NCSD will continue developing interactive dashboards (e.g., live evacuation maps, fire weather alerts) and creating mobile-friendly content for residents and visitors.
Hazard mitigation information available on your website	NCSD hosts dedicated pages for Emergency Preparedness, Evacuation, and a Fuels Management HUB with wildfire risk maps, project status, and mitigation tips. Information could be expanded to include real-time evacuation route status, QR codes for defensible-space compliance, and multilingual resources for renters/visitors. https://nfd-fuelsmanagement-ncsd.hub.arcgis.com/
Social media for hazard mitigation education and outreach	NCSD uses social media platforms to share fire danger ratings, red flag warnings, evacuation prep tips, and project updates. NCSD could increase posting frequency during peak fire season, integrate with Ready Placer alerts, and promote seasonal campaigns (Wildfire Preparedness Week, National Preparedness Month).
Community newsletter	NCSD Fire contributes quarterly articles to Northstar Living Magazine covering wildfire mitigation, defensible space, and seasonal safety. NCSD could develop a dedicated NCSD Fire e-newsletter for subscribers with more frequent updates and event notifications.
Local news	NCSD could build partnerships with regional outlets (Sierra Sun, Moonshine Ink) to highlight mitigation projects and evacuation readiness campaigns.
Citizen boards or commissions that address issues related to hazard mitigation	**Measure U Citizens' Oversight Committee** reviews fuels program expenditures and provides community input on CWPP project prioritization. The program could be expanded to include outreach campaigns and annual community risk assessment workshops.

Outreach Resources	Description, Expansion, Improvement
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	NCSD participates in informal outreach at community events. Outreach could be expanded by launching an annual Wildfire Preparedness Day or "Chipping & Chili" event with defensible space demos, kids' education, and evacuation drills.
Natural disaster/safety programs in place for schools	A preschool has recently opened within the NCSD service boundary; no standing fire safety program exists yet. NCSD could develop a preschool wildfire safety curriculum, staff training, and family take-home materials on evacuation.
Organizations that conduct outreach to socially vulnerable populations and underserved communities	Partner with local lodging providers, HOAs, and Placer County OES to create visitor/renter-specific evacuation flyers (QR codes in STR units) and register-at-risk residents for Ready Placer alerts.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	NCSD Fire website and Fuels Management HUB provide extensive public education, risk maps, and project updates. Enhance by integrating community survey tools, hazard reporting forms, and metrics dashboards to measure outreach effectiveness. https://www.northstarcsd.org/FireDept.WelcomePage
Other: Northstar California Resort – Snow safety and avalanche control operations	Northstar California Resort conducts ongoing snow safety and avalanche control operations, including condition monitoring, physical site assessments, and mitigation when warranted. These activities support internal safety awareness among staff and help inform guest-facing communications regarding mountain conditions and operational safety during winter weather events.

22.5.8 Community Classifications

Table 22-8 summarizes classifications for community programs available to NCSD.

Table 22-8. Community Classifications

Program	Participating?	Classification	Date Classified
Firewise Communities classification	Yes	Renewing of certification was completed Nov. 2025 and valid through Nov. 2026	-
CAL FIRE Risk Reduction Community List	Yes	Updated 2026 list will be announced by the CA Board of Forestry in July 2026.	-

22.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 22-9 summarizes the adaptive capacity for each identified hazard of concern and NCSD's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.

- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 22-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak Avalanche control and forecasting fall under the authority of the Sierra Avalanche Center and Placer County Office of Emergency Services. NCSD has no jurisdiction or operational responsibility for avalanche mitigation.
Dam and Levee Failure	Moderate NCSD owns and operates Reservoir A under regulation of the California Department of Water Resources Division of Safety of Dams (DSOD). NCSD conducts monthly inspections, participates in annual DSOD inspections, and maintains a current Emergency Action Plan that includes notification procedures, contact lists, and annual call-down drills. Compliance with DSOD regulations provides a moderate level of adaptive capacity.
Drought and Water Shortage	Strong NCSD maintains a Water Shortage Contingency Plan adopted in June 2023 and participates in the Martis Valley Groundwater Management Plan, which ensures supply sustainability. NCSD has developed redundant wells and interties that enhance water reliability. These measures represent moderate adaptive capacity.
Earthquake	Weak Building code enforcement and seismic design are managed by Placer County. NCSD maintains continuity of operations plans for essential facilities but has limited independent mitigation authority.
Flood	Moderate While primary floodplain management lies with Placer County, NCSD coordinates with the County for drainage maintenance, provides sandbag materials, and maintains key infrastructure above flood elevations. Coordination and operational readiness elevate adaptive capacity to moderate.
Landslides, Mudslides, and Debris Flow	Weak These events are secondary to severe storms and wildfire burn scars. NCSD does not have geotechnical authority but responds through emergency access and debris management operations.
Freeze and Snow	Strong NCSD operates snow removal services under contract with Placer County and maintains 24/7 staffing and heavy equipment (loaders, blowers, graders). Service levels exceed county standards, providing strong adaptive capacity.
Heavy Rains and Storms	Moderate NCSD coordinates with Placer County for drainage system maintenance and performs localized response through the Fire and Operations Departments. Backup power planning further increases readiness.

Hazard	Adaptive Capacity
High Winds and Tornadoes	Moderate NCSD coordinates with Liberty Utilities and maintains a Critical Power Interruption Emergency Response Plan to address outages during wind events. This provides redundancy for essential services.
Wildfire	Strong NCSD implements defensible space inspections, vegetation management, and Firewise renewal, and maintains a current Community Wildfire Protection Plan. These efforts demonstrate a strong and improving adaptive capacity.

22.6 National Flood Insurance Program

NCSD is a special district within Placer County. NCSD does not participate in the NFIP directly. Therefore, all structures located within NCSD's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

22.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

22.7.1 Hazard Area

The probable hazard areas within the NCSD service boundary are shown in Figure 22-4 through Figure 22-8. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Placer has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 22-4. Avalanche Hazard Area

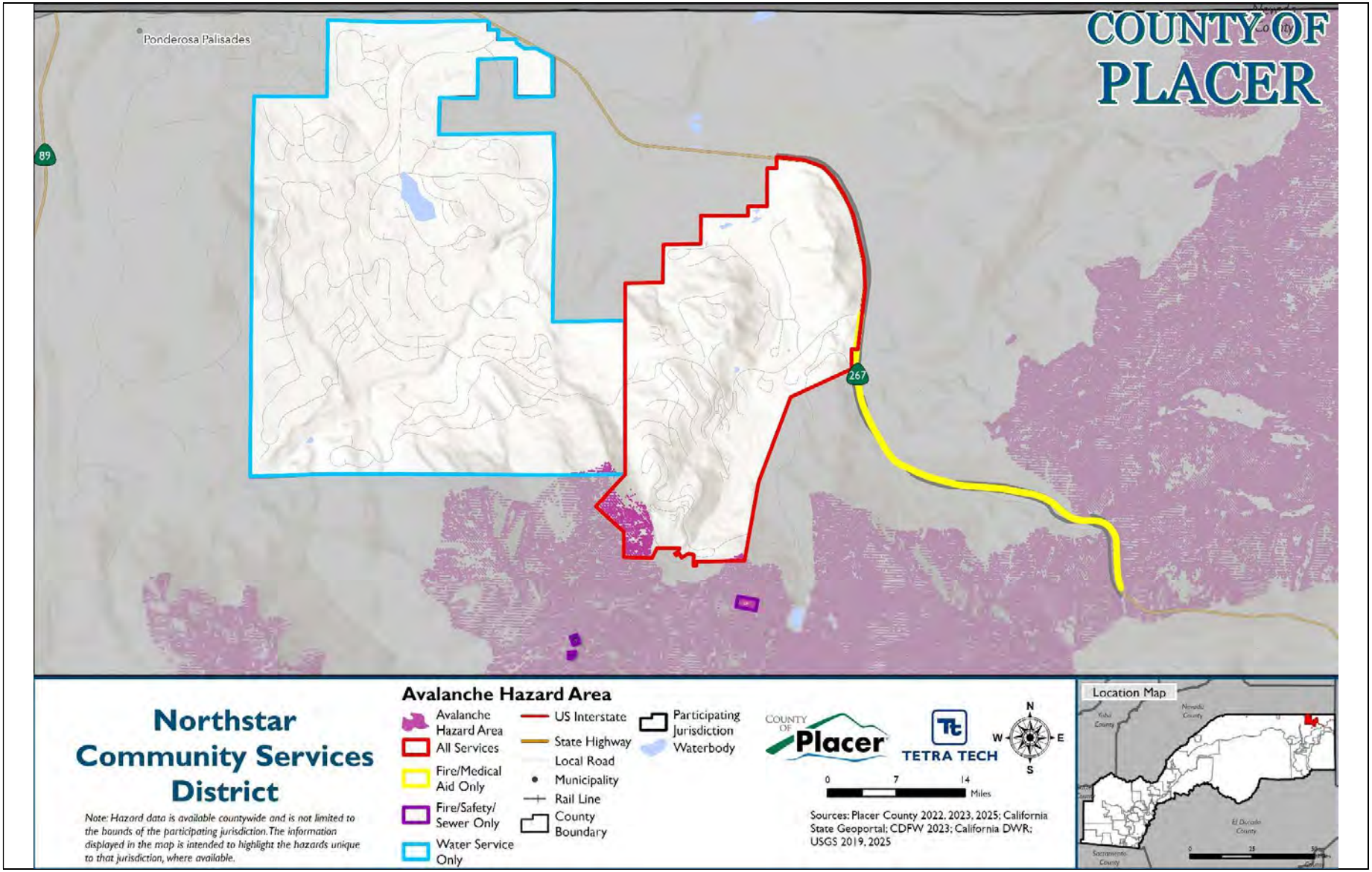


Figure 22-5. Dam Inundation Hazard Area

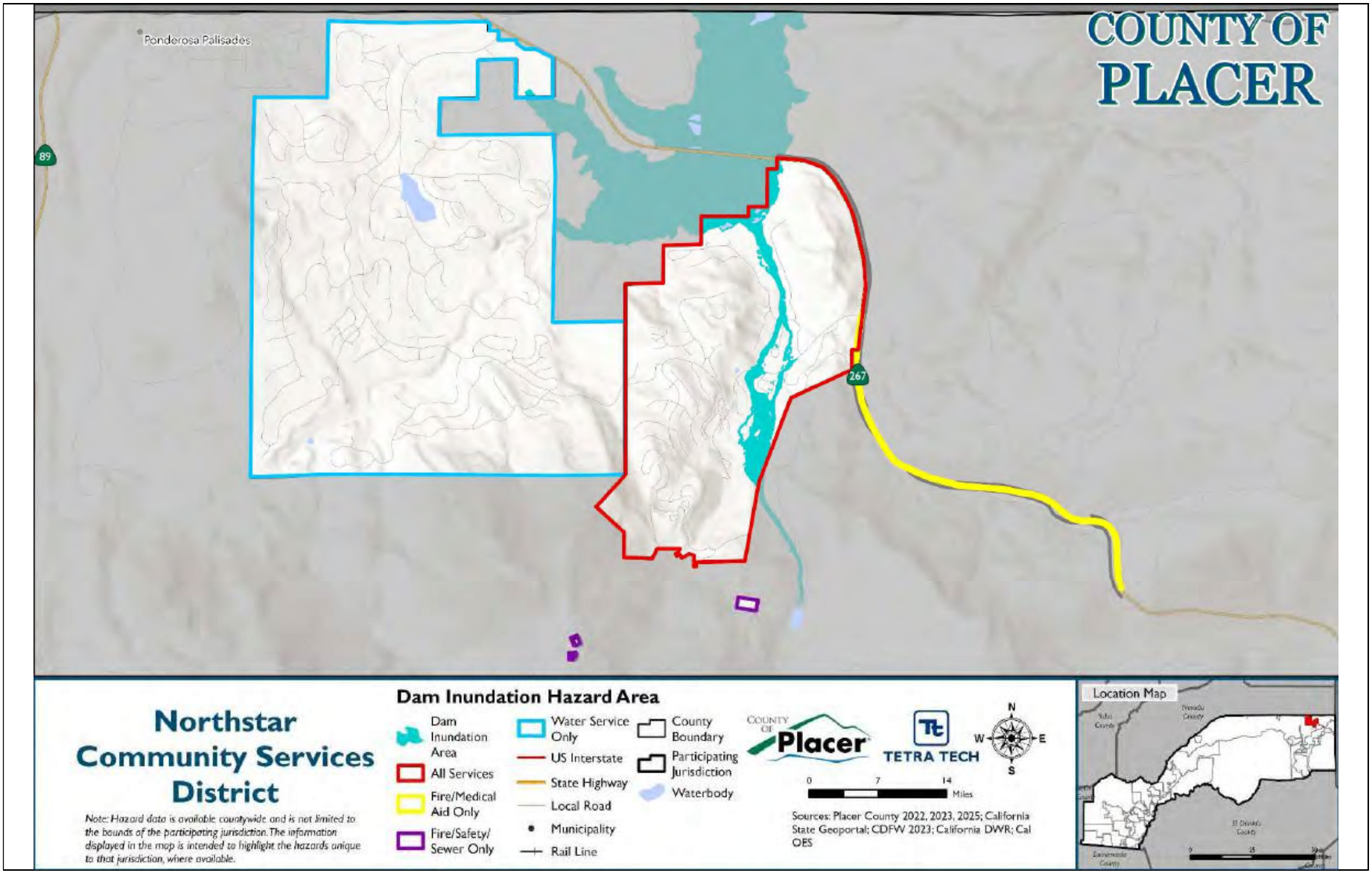


Figure 22-6. Flood Hazard Area

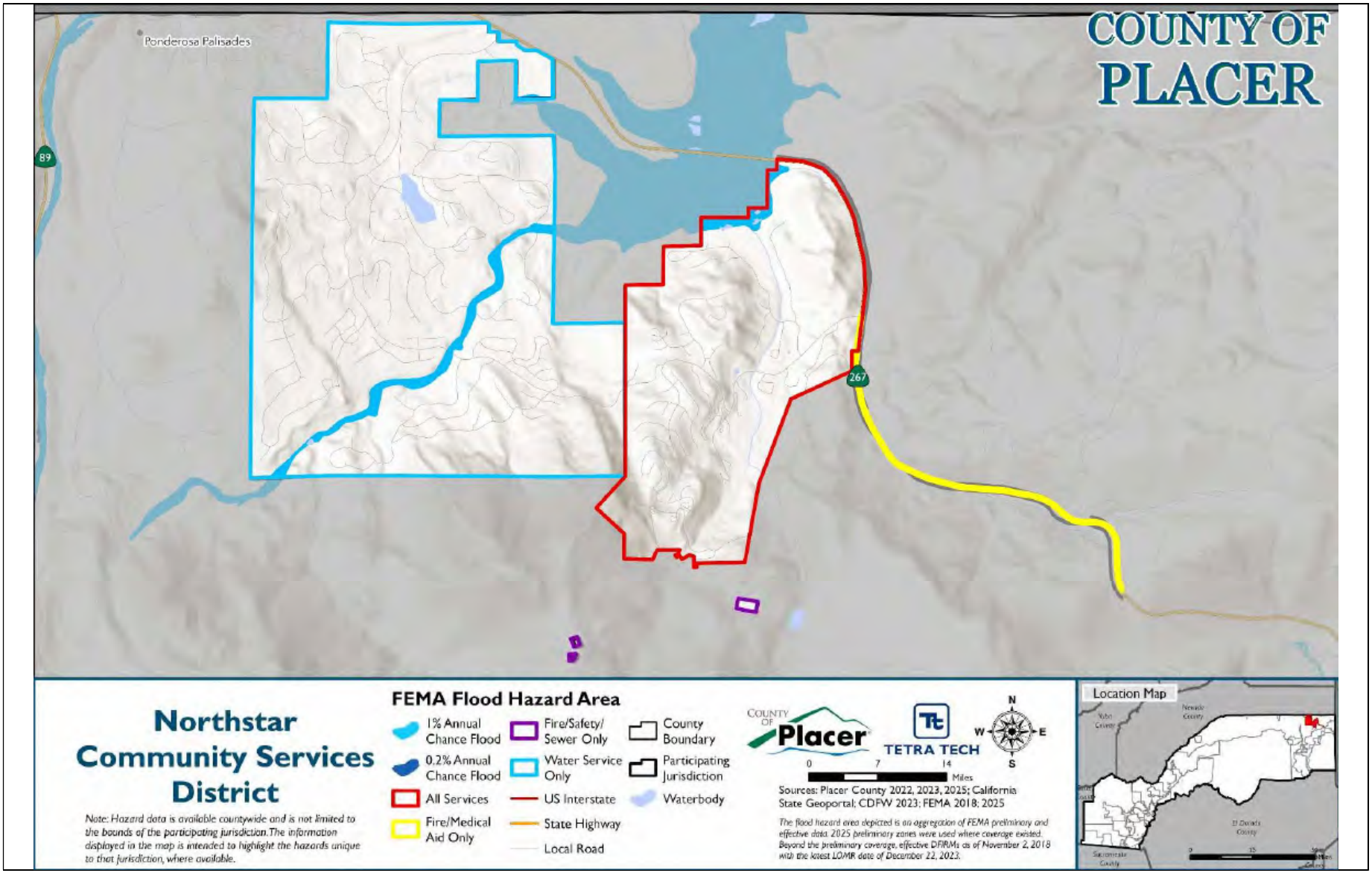


Figure 22-7. Landslide Hazard Area

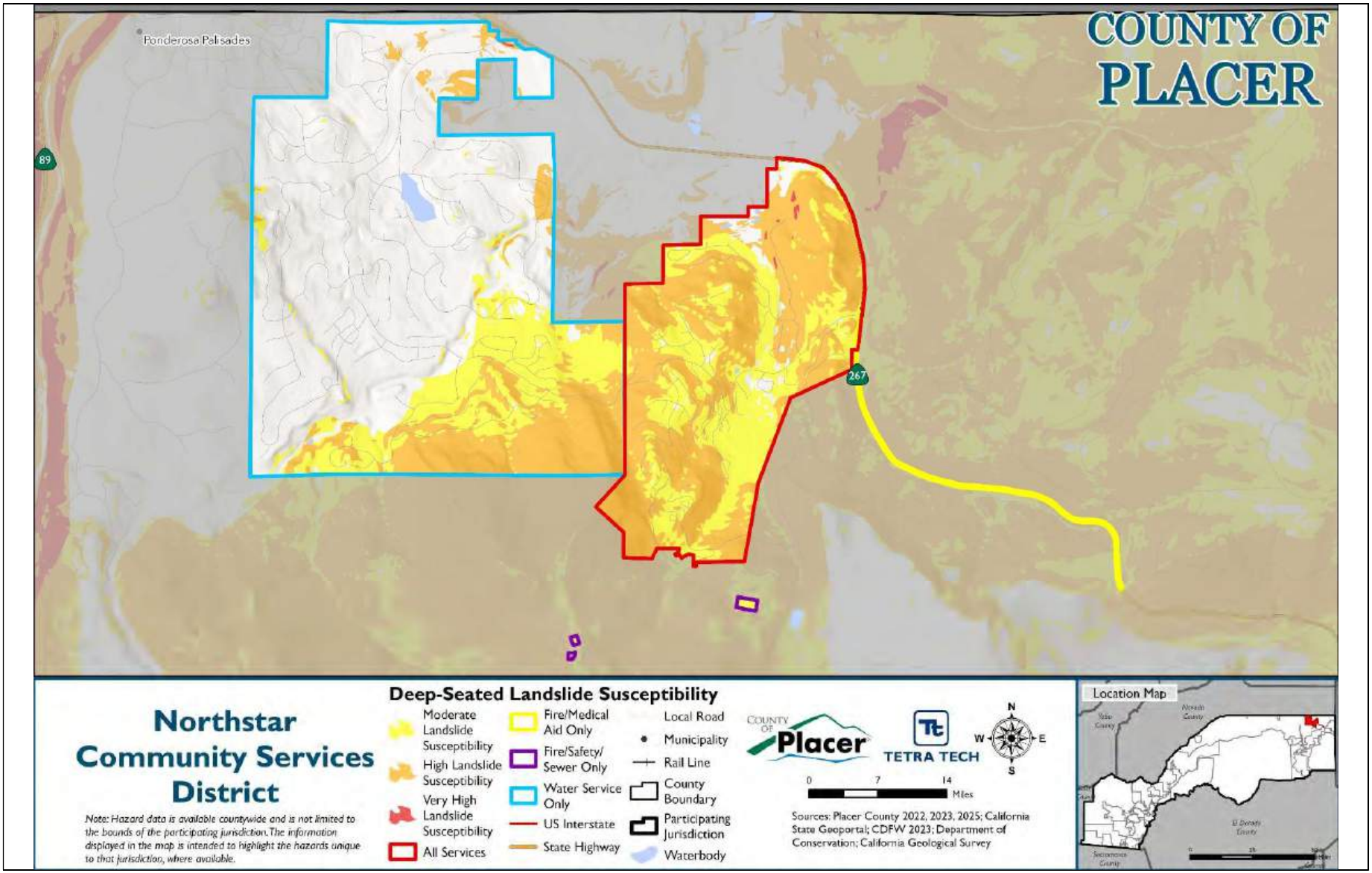
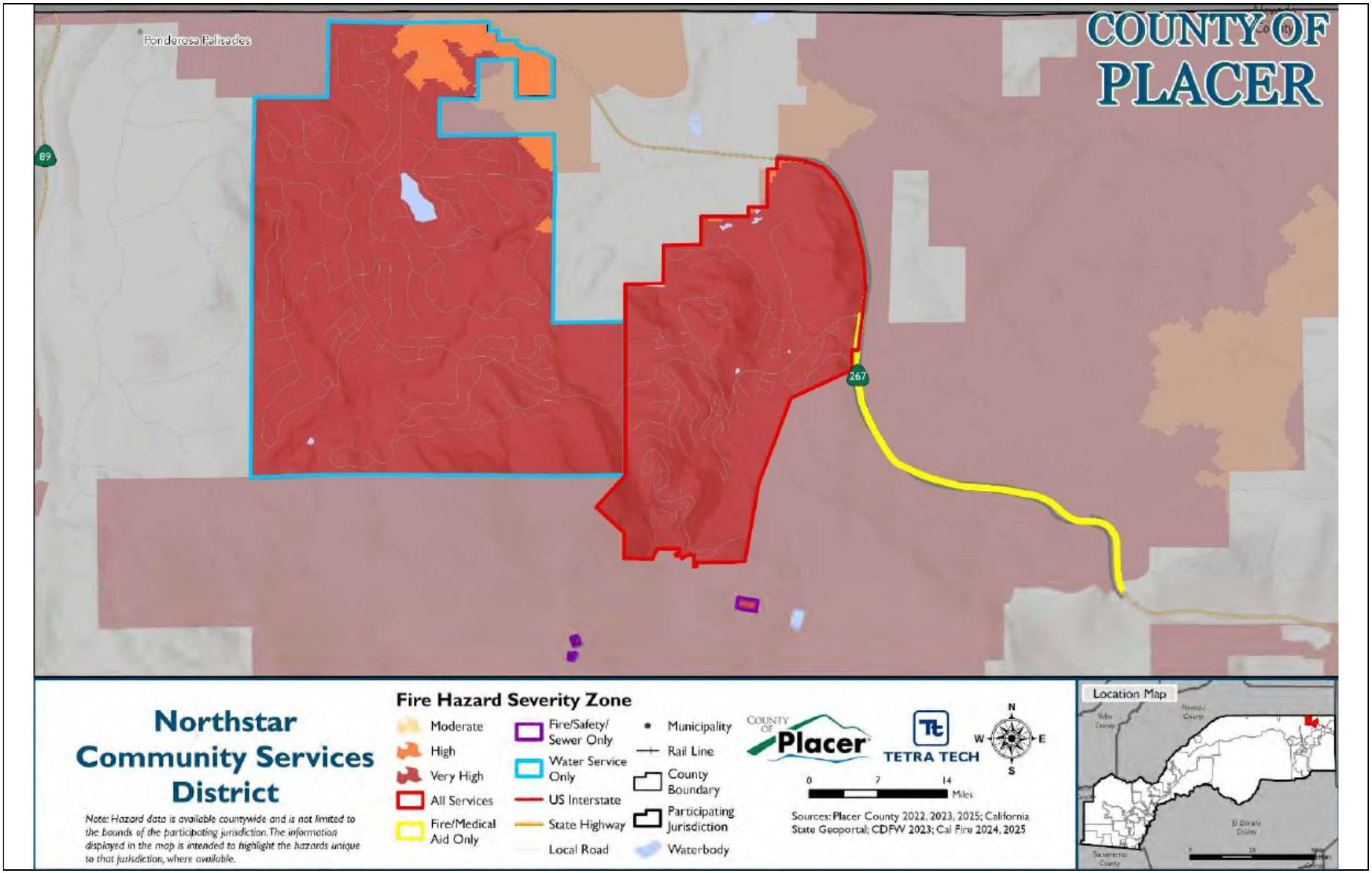


Figure 22-8. Wildfire Hazard Area



22.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 22-10 provides details on loss and damage in NCSD during hazard events since the last hazard mitigation plan update.

Table 22-10. Hazard Event History in NCSD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 10, 2022	December 10, 2022	Strong Wind	Another weekend storm delivered widespread rain, mountain snow and gusty winds to interior NorCal. Localized flooding, downed trees, and mountain travel impacts were observed starting on 12/9/22 through early 12/12/22. Sacramento International Airport reported a max gust of 52 mph. California Highway Patrol reported multiple downed trees and power lines across the Sacramento Area, resulting in 32,431 customers across the Sacramento region without power according to broadcast media.	Power surge event at pump station resulting in pump faults.
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Power surge event at pump station resulting in pump faults, and surge protection failure.
May 29, 2023	May 29, 2023	Cold/ Wind Chill	Melting snow brought unusually strong currents and cold water to area waterways in the month of May. A 22-year-old woman drowned in the Clavey River on May 29th, with her body found downstream of Clavey Bridge on June 3rd. Warm weather was occurring with highs in the region in the lower 70s, while area waterways were cold with strong currents from mountain snowmelt.	Abnormally high turbidity in raw water influent to water treatment plant.
January 31, 2024	January 31, 2024	Strong Wind	An active weather pattern brought gusty winds with downed trees, heavy rain and mountain snow with mountain travel delays and chain restrictions, and isolated thunderstorms to end the month of January, and continued into early February. California Highway Patrol reported multiple large branches down on eastbound Interstate-80. They also reported a tree down, blocking the road at Courtland Road and Morse Road. Auburn Municipal Airport reported a max gust of 41 mph.	Power surge/ failure event which resulted in a surge suppressor failure, pump motor soft start failure at a pump station and a small fire in an electrical box at a potable well facility

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
June 25, 2024	June 25, 2024	Cold/Wind Chill	Two fatalities were reported due to cold and fast moving waterways along the North Fork American River near Auburn on June 25th, 2024. Crews responded to the report of a possible drowning at Lake Clementine Trail before 5:30 p.m. on June 25th, 2024. A communications manager for California State Parks said three people had attempted to swim across the river and were swept downstream by the current. A 33-year-old man was found dead in the water, the El Dorado County Sheriff's Office said. Officials said a 15-year-old boy was found, and CPR was performed by State Parks lifeguards and Cal Fire. He was taken to Sutter Auburn Faith Hospital where he later died. State parks said another teenage male was pulled from the water and was uninjured. Water temperatures were in the low to mid 60's.	Power surge event at sanitary sewer pump station resulting in pump faults.
December 14, 2024	December 14, 2024	Strong Wind	Active weather brought periods of heavy mountain snow, rain and gusty winds from December 12th through December 17th as multiple storms moved through the area. The strongest storm moved through over the December 13th through 14th timeframe and brought over 2 to 3 inches of rain, over 2 feet of heavy snow above 5000 feet, and gusty southerly wind gusts of 35 to 65 mph. Numerous downed trees and thousands of power outages were reported during this time, along with mountain highway closures and chain restrictions, with roadway flooding in the Central Valley. California Highway Patrol reported a tree down on powerlines from gusty southerly winds.	Power failure effecting all NCSD facilities.

22.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

NCSD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, NCSD indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- Dam and levee failure ranking revised to Medium due to District ownership of a regulated reservoir and associated compliance obligations, elevating the significance of this hazard.
- Drought and water shortage ranking revised to Low because NCSD operates a groundwater-based supply and, with redundancy, and is positioned to meet statewide drought regulations through the various tiers of the adopted drought contingency plan.
- Flood ranking revised to Medium because localized flooding occurs in certain areas during heavy rain events, warranting a moderate level of concern despite the absence of major floodplains.

- Freeze and Snow ranking revised to Medium due to annual heavy snowfall and freeze events that increase operational workload and costs, even with strong adaptive capacity.
- High winds and tornadoes ranking revised to Medium as sustained winds can cause power outages and fire-weather conditions, affecting NCSD operations despite negligible tornado risk.

Table 22-11 shows NCSD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for NCSD; hazards with a low ranking are not considered to be hazards of local concern for NCSD. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 22-11. Hazard Ranking

Hazard	Rank
Avalanche	Low While the region is mountainous, avalanche hazard areas are outside the NCSD service boundary and are monitored by the Sierra Avalanche Center and Placer County OES. NCSD has no avalanche-control responsibility.
Dam and Levee Failure	Medium NCSD owns and operates Reservoir A, regulated by the California Department of Water Resources Division of Safety of Dams (DSOD). NCSD maintains a current Emergency Action Plan and performs monthly and annual inspections. Compliance with DSOD requirements and direct ownership elevate this hazard to Medium significance.
Drought and Water Shortage	Low NCSD operates a groundwater-based supply within the Martis Valley Basin and maintains a Water Shortage Contingency Plan (adopted 2023). Redundancy exists, and NCSD is well positioned to meet statewide drought requirements making this a low-level concern.
Earthquake	Low Seismic risk exists regionally, but NCSD has limited infrastructure exposure and no building-code enforcement role. Continuity planning and emergency response would occur under Placer County coordination.
Flood	Medium Certain low-lying and roadside areas experience localized flooding during rain-on-snow and heavy-rain events. While major floodplains are absent, storm drainage constraints justify a moderate ranking.
Freeze and Snow	Medium Heavy snowfall and freeze events occur annually. NCSD provides 24/7 snow-removal operations under county contract, maintaining high service levels. Operational workload and cost justify a moderate ranking even though adaptive capacity is strong.
Heavy Rains and Storms	Medium Increasing atmospheric-river events produce strong winds, high precipitation, and power disruptions. NCSD manages infrastructure continuity and public-safety support, warranting a medium ranking.

Hazard	Rank
High Winds and Tornadoes	Medium Tornado potential is negligible, but sustained high winds cause power outages and fire-weather conditions affecting NCSD operations.
Landslides, Mudslides, and Debris Flow	Medium Slopes along SR-267 and near drainages are prone to debris movement during heavy rain or post-fire conditions. Coordination with Placer County and Caltrans is ongoing
Wildfire	High Wildfire remains the highest-priority hazard due to regional fuel loading, single-access egress routes, and direct threats to life safety, property, and the local economy.

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

22.7.4 Vulnerability Assessment

Table 22-12 lists issues related to the top hazards of concern for NCSD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for NCSD, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 22-12. Hazard Issues

Issue	Hazards Addressed
The Reservoir A Dam is rated as High Hazard by the California Department of Water Resources.	Dam Failure
While NCSD maintains a Community Wildfire Protection Plan with prioritized projects, it lacks the funding to implement all projects listed in the plan.	Wildfire
A Critical Power Interruption Emergency Response Plan was drafted in 2021 identifying critical facilities and documenting operational considerations for backup power. This solves the problem of keeping NCSD services available when line power is unavailable.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
The entire NCSD service area is located in the High and Very High Fire Hazard Severity Zones and wildfire mitigation requires annual fuels management and defensible space inspections.	Wildfire, Drought and Water Shortage, High Winds and Tornadoes

22.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 22-13 describes the potential impacts of the hazards of local concern to NCSD (hazards identified as medium or high risk in Table 22-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on NCSD-owned assets.

Table 22-13. Hazard Impacts

Hazard	Potential Impacts
Dam and Levee Failure	NCSD ownership of a regulated reservoir introduces risk of dam failure, which could cause downstream flooding and severe infrastructure damage. While compliance with state safety requirements and emergency planning reduces risk, the potential impact remains significant. During dam failure, flow will travel north through West Martis Creek and it will inundate Highlands View Road, the first infrastructure impacted, which has a maximum conveyance of approximately 1,800 CFS. Northstar Drive and Basque Drive are also inundated before reaching State Route 267 (SR 267). Basque Drive has a corrugated metal pipe culvert that can only handle a small portion of peak flow; flood flows will overtop Basque Drive. From Basque Drive, flood flows will travel north through the Northstar Golf Course and the enter the Martis Creek Trail and Wildlife Area. Because of the large storage capacity of the Martis Creek Wildlife Area, only a peak flow of 2,360 cfs will pass through Martis Creek Lake and SR267 will not be overtopped. Inundation mapping identified 12 single family homes, five multi-family structures and a golf course clubhouse as being affected by a catastrophic dam failure.
Drought and Water Shortage	Groundwater supply within the Martis Valley Basin faces low risk from statewide drought conditions and rising demand. With redundancy and contingency planning, prolonged drought will not limit water availability or affect service reliability.
Flood	Localized flooding during heavy rain or rain-on-snow events can overwhelm Placer County storm drainage systems, damage infrastructure, and restrict access to facilities. Flooding may also increase turbidity in raw water influent, complicating treatment processes and raising operational costs.
Freeze and Snow	Annual heavy snowfall and freeze events create hazardous conditions, increase operational workload for snow removal, and elevate costs. Prolonged cold can strain infrastructure and lead to service interruptions if access to facilities is compromised.
Heavy Rains and Storms	Increasing atmospheric river events bring high precipitation, strong winds, and power disruptions. These conditions can damage electrical systems, cause pump station failures, and increase turbidity in water sources, impacting treatment and delivery
High Winds and Tornadoes	Strong winds can cause power outages, damage electrical components, and disrupt water system operations. Past events have resulted in surge suppressor failures, pump faults, and even small electrical fires, highlighting the vulnerability of critical infrastructure during severe wind events. Backup power is available at the following NCSD Facilities: **District Backup Generator Summary Table** Facility / Fuel Volume When Full (Gallons) / Generator Power Rating (KW) / 1/2 Load Backup Power Duration (Hours) / Full Load Backup Power Duration (Hours) / Typical Days Between Refueling Corporate Yard: 105 / 60 / 36 / 22 / 1 Administration Building: 660 / 250 / 57 / 34 / 1-2 Northstar Fire Dept. - Station #31: 830 / 125 / 128 / 73 / 3-5 Northstar Fire Dept. - Station #32: 1700 / 300 / 131 / 73 / 3-5 Sewer System - Retreat Lift Station: 383 / 100 / 93 / 52 / 2-4 Sewer System - Highway 267 Lift Station: 300 / 60 / 103 / 63 / 2-4 Sewer System - Indian Hills Lift Station: Natural Gas - N/A / 30 / N/A / N/A / No Refueling Northstar Water System - Reservoir D Tanks and Pump Station: 147 / 70 / 46 / 27 / 1-2 Northstar Water System - Water Treatment Facility: 575 / 250 / 50 / 30 / 1-2 Zone 4 Water System - Schaffer's Mill Well #3: 380 / 180 / 56 / 30 / 1-2 Zone 4 Water System - Lahontan Well #1: 400 / 300 / 31 / 17 / 1 Zone 4 Water System - Schaffer's Mill Tank and Pump Station: 200 / 120 / 42 / 23 / 1-2 Zone 4 Water System - Newhall Pump Station: 500 / 275 / 48 / 25 / 1-2 Zone 4 Water System - Olana Pump Station: 278 / 150 / 46 / 29 / 1-2
Landslides, Mudslides, and Debris Flow	Slopes near major roadways and drainage areas are prone to debris movement during heavy rain or post-fire conditions. Such events can damage infrastructure, block access routes, and require coordinated response with county and state agencies.
Wildfire	Wildfire poses the highest risk to life safety, property threatening 1075 residential, condominium and commercial structures, and the local economy due to regional fuel loading and limited egress routes. Fire can damage water and sewer infrastructure, disrupt power supply, and require extensive emergency response efforts.

22.7.6 Changing Conditions That May Impact Risk

Northstar Community Services District (NCSD) has significantly reduced wildfire risk through sustained mitigation investments, including $4.3 million in fuels reduction funding and the treatment of more than 2,5 acres throughout the NCSD service area and surrounding wildland-urban interface. As part of these efforts, primary and secondary evacuation routes have been cleared up to 300 feet from the centerline of key egress roadways, improving evacuation reliability, firefighter access, and life-safety outcomes during wildfire incidents. Treated forest residuals will soon be able to be utilized at the NCSD Wood Energy Facility, which is being constructed in 2026, eliminating long-term roadside piling, reducing re-accumulation of hazardous fuels, and ensuring that biomass removal results in permanent risk reduction rather than temporary displacement.

No significant development changes have been identified that would affect NCSD's overall vulnerability since the previous plan was approved.

22.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

22.8.1 Changes in Community Priorities

The NCSD's priorities have shifted toward strengthening emergency preparedness and reducing wildfire risk. Recent planning emphasizes the development of comprehensive response strategies for critical service interruptions, proactive vegetation management to create defensible space, and enhanced coordination for hazard mitigation. These changes reflect a commitment to protecting life safety, maintaining essential services, and improving resilience against natural hazards and operational disruptions.

22.8.2 Past Mitigation Action Status

Table 22-14 indicates progress on the NCSD's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 22-14. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	The Forest Fuels Management tracks and identifies tree mortality on a year-round schedule. Once a tree is identified for removal it is prioritized based on the severity of mortality and the hazard it possesses. Tree mortality used to be addressed in the spring and fall months with a fixed budget. Now, tree mortality must be addressed year-round and is ongoing	Tree Mortality	Not Complete	Yes	
2	This plan identifies prioritization of treatment areas for Forest Fuels Reduction based on guidance from the Community Wildfire Protection Plan (CWPP). Forest Fuels Reduction and the CWPP are ongoing and to not have an end date.	Wildfire Mitigation	Not Complete	Yes	
3	This plan identifies all backup power systems for NCSD facilities and provides considerations for keeping systems operational during extended outages.	Critical Power Interruption Emergency Response Plan	Complete	No	New plan completed in 2021. Action will be revised to include plan implementation.
4	The EAP defines the responsibilities and provides procedures to identify and effectively address unusual and unlikely conditions that may endanger the Reservoir A Dam and nearby areas in time to take mitigating actions and notify the appropriate emergency management officials. The Department of Water Resources (DWR), Division of Safety of Dams (DSOD) has rated the Reservoir A Dam as “High” based on hazard classification. Because of its hazard classification, NCSD developed the EAP in accordance with the requirements listed in California Water Code Sections 6160 and 6161 and Government Code Section 8589.5, following FEMA’s Federal Guidelines for Dam Safety: Emergency Action Planning for Dams (FEMA 64/July 2013).	Emergency Action Plan – Reservoir A Dam	Complete	Yes	

22.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, NCSD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Total Green Waste Disposed Since June 2022 = 2,596 Yd^3
- Forest Fuels Reduction in Acres Treated Curbside Pick-up
  - 2025 = 186 acres
  - 2024 = 245 acres
  - 2023 = 119 acres
  - 2022 = 245 acres
  - 2021 = 186 acres

- Total Acres Treated = 981 acres

- Northstar California Resort implements a range of erosion and sediment control measures throughout the broader Northstar community. These include routine inspections, application of best management practices (BMPs), and maintenance activities aimed at protecting slope stability, stormwater infrastructure, and downstream drainage systems.

22.8.4 Hazards Omitted from Mitigation Strategy

All hazards profiled in this MJHMP were included in the NCSD's mitigation strategy.

22.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that NCSD would like to pursue in the future to reduce the risk from hazards.

Table 22-15 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 22-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	X	-	-	-
Dam and Levee Failure	X	-	-	-
Drought and Water Shortage	-	-	X	-
Earthquake	X	-	-	-
Flood	X	-	-	-
Freeze and Snow	X	-	-	-
Heavy Rains and Storms	X	-	-	-
High Winds and Tornadoes	X	-	X	-
Landslides, Mudslides, and Debris Flows	X	-	-	-
Wildfire	X	-	X	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 22-16 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 22-16. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
NCSD-01	Emergency Action Plan	7	1-10 Years	High	Medium	8.75	High
NCSD-02	Wildfire Mitigation	6	1-10Years	High	Medium	8.5	High
NCSD-03	Critical Power Interruption Emergency Plan	6	1-10 Years	High	Medium	8.5	High
NCSD-04	Fuels Management for Defensible Space	7	1-10 Years	High	High	6.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

22.8.6 Mitigation Strategy

Table 22-17 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The NCSD General Manager will lead implementation of all projects listed in Table 22-17. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in NCSD priorities.

Table 22-17. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
NCSD-01	Emergency Action Plan	Maintain, update, and implement the Dam Failure Emergency Action Plan (EAP) for Reservoir A Dam. The plan prescribes measures for emergency reservoir operations such as high flow operations, non-failure emergencies, potential dam failure, and imminent dam failure. The EAP defines the responsibilities and provides procedures to identify and effectively address unusual and unlikely conditions that may endanger the Reservoir A Dam and nearby areas in time to take mitigating actions and notify the appropriate emergency management officials. Northstar CSD developed the EAP in accordance with the requirements listed in California Water Code Sections 6160 and 6161, and Government Code Section 8589.5, following FEMA's Federal Guidelines for Dam Safety: Emergency Action Planning for Dams.	Dam Failure	Public Works	N/A	NCSD Operational and Capital Funding

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
NCSD-02	Wildfire Mitigation	Maintain and implement the Northstar Community Wildfire Protection Plan (CWPP) as a living document guiding risk-reduction investments, fuel-treatment priorities, and public education. Planned implementation projects include, but are not limited to, fuels reduction, defensible space inspections, tree removal, establishment of buffer zones, coordination with partners, and maintenance of the community Firewise designation.	Wildfire	Northstar Fire Department	Placer County OES, Tetra Tech, CAL FIRE, Truckee Fire	NCSD Measure U Operational Budget, CAL FIRE Wildfire Resilience Grants, FEMA Hazard Mitigation Grant Program
NCSD-03	Critical Power Interruption Emergency Plan Implementation	Implement the Critical Power Interruption Emergency Plan to keep NCSD services available when line power is unavailable due to natural hazards. This plan identifies all backup power systems for NCSD facilities and provides considerations for keeping systems operational during extended outages.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Public Works	N/A	NCSD Operational and Capital Funding
NCSD-04	Fuels Management for Defensible Space	The Northstar Fire Department will implement annual forest fuels reduction work within and outside of the Wildfire Prevention Zone, including, but not limited to, evacuation routes, structure protection, infrastructure, and open space common area treatments. The Department will also conduct residential and commercial defensible space inspections, and provide community “Curbside Pick-Up” programs to reduce hazardous fuels and minimize the risk of structure loss from wildfire and high winds.	Wildfire, Drought and Water Shortage, High Winds and Tornadoes	Northstar Fire Department	Placer County Office of Emergency Services, CAL FIRE, Truckee Fire Protection District	NCSD Measure U Operational Budget, California Department of Forestry and Fire Protection Greenhouse Gas Reduction Fund grants, Placer County, Local Funding, and FEMA Hazard Mitigation Grant Program

23. Olympic Valley Public Service District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Olympic Valley Public Service District (Olympic Valley PSD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Olympic Valley PSD, describes who participated in the planning process, assesses Olympic Valley PSD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Countywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Olympic Valley PSD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

23.1 Hazard Mitigation Planning Team

Olympic Valley PSD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Hans Walde, Fire Captain

Address: 305 Olympic Valley Rd, Olympic Valley, CA 96146

Phone Number: 530-583-6111

Email: hwalde@olympicvalleyfire.org

Alternate Point of Contact: Nic Massetani, Operations Superintendent

Address: 305 Olympic Valley Rd, Olympic Valley, CA 96146

Phone Number: 530-583-4692

Email: nmassetani@ovpsd.org

The Olympic Valley Fire Department represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and

stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 23-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 23-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Hans Walde	Olympic Valley Fire	Fire Captain	Primary point of contact for plan development
Nic Massetani	Olympic Valley Public Service	Operations Superintendent	Secondary point of contact for plan development
Brad Chisholm	Olympic Valley Fire	Fire Chief	Contributed to worksheets, reviewed draft documents
Ashley Massey	Olympic Valley Public Service	Program Analyst	Public Outreach and Social Media
Alexa Herring	Olympic Valley Public Service	Assistant Engineer	GIS/Shape File

23.2 Community Profile

Olympic Valley PSD serves the community of Olympic Valley in providing water, maintaining sewer Lines, contracting garbage service, and providing fire protection, EMS and prevention services to the community. The Olympic Valley PSD encompasses approximately 5,350 acres within the Olympic Valley. Elevations within the District boundaries range from 6,100 to 9,000 feet above mean sea level.

Olympic Valley PSD serves a population of approximately 924 year-round residents, with a maximum overnight population of approximately 6,573. Both resident and visiting populations are housed in approximately 663 residential unit, 1,180 condominiums, and approximately 50 commercial entities consisting of private residences, ski resorts, hotels and supporting businesses.

23.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Olympic Valley PSD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

23.3.1 Outreach Activities

Olympic Valley PSD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The public was provided multiple opportunities to participate in the planning process as shown in Figure 23-1 through Figure 23-2. Flyers were posted at the main entrances of the Olympic Valley PSD and Fire Department, as well as at the Olympic Valley Post Office, on June 27, 2025 (See Figure 23-2). As part of this effort, Olympic Valley PSD created a SurveyMonkey questionnaire to assess the needs of vulnerable populations within the community and included links to the Placer County MJHMP meetings.

Figure 23-1. Instagram Post for OVPSD and OVFD

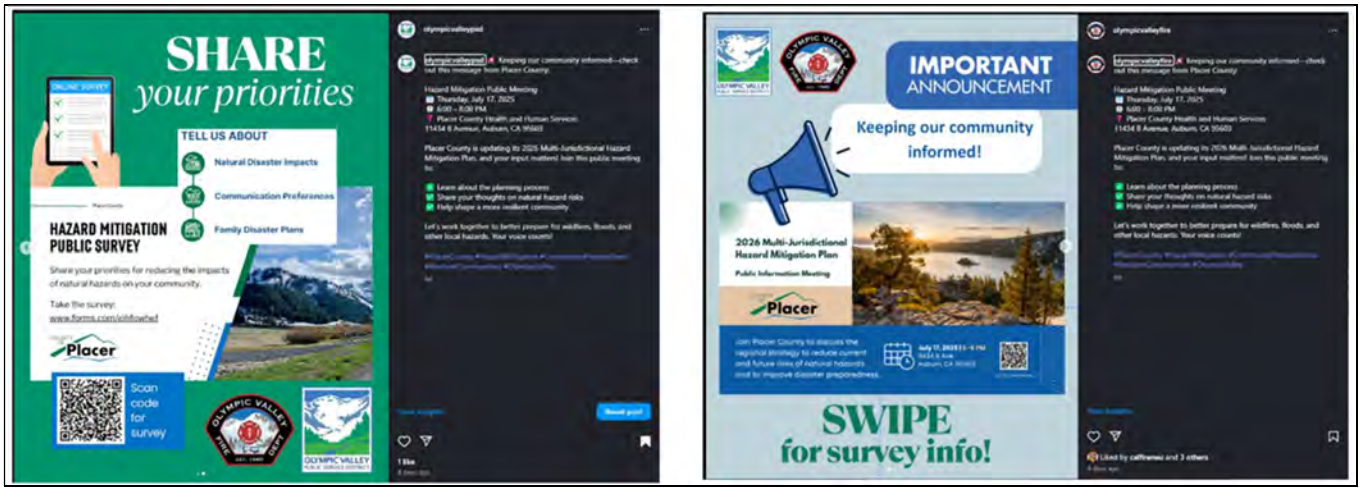
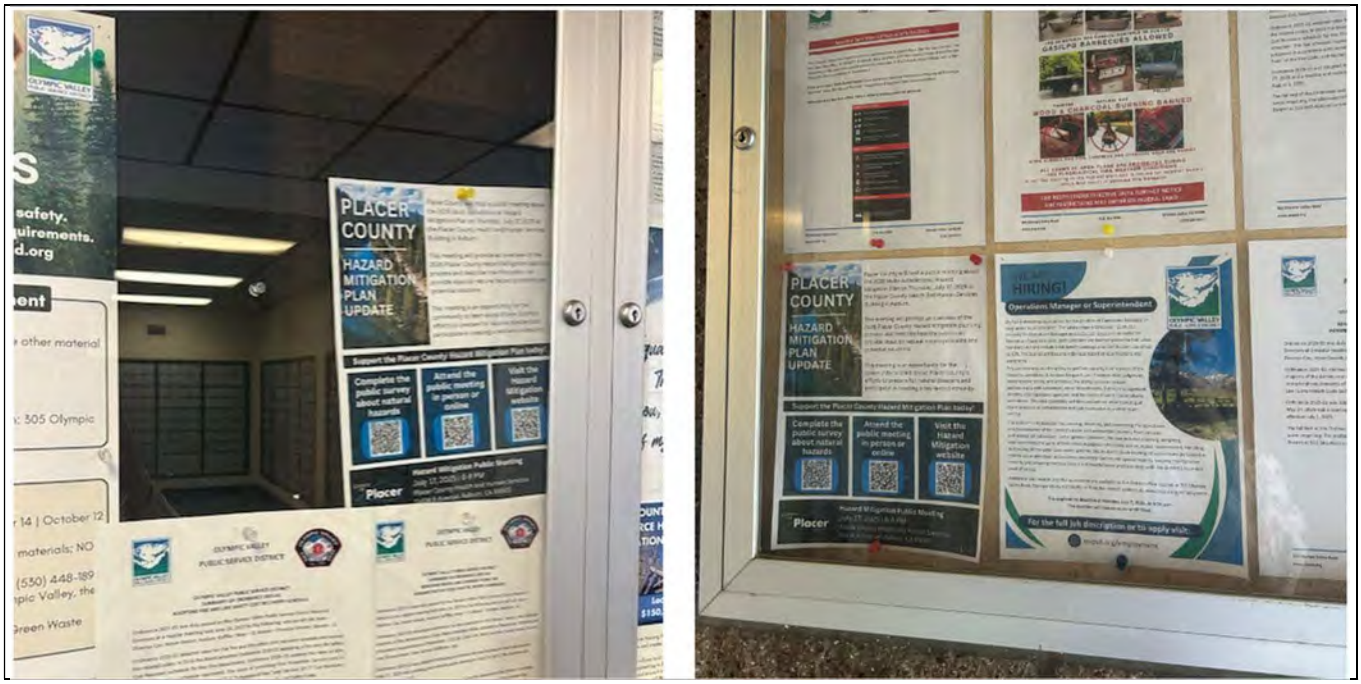


Figure 23-2. Physical Posts



23.3.2 Public Feedback Integration

Olympic Valley PSD received minimal response from the community. Social media posts were viewed by several hundred people and occasionally shared, however, no comments were received on multiple social media posts. The lack of feedback on social media posts or direct questions to the PSD signals that the community is confident in the District's actions and assessments of community needs.

23.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

23.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- CAL FIRE
- Lahontan Regional Water Quality Control Board
- Sierra Avalanche Center

23.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- Placer County Community Development Resource Agency
- Tahoe Regional Planning Agency

23.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District.

- North Tahoe Fire Protection District
- Truckee Fire Protection District

23.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District.

- Lake Tahoe Preparatory School
- Tahoe Truckee Unified School District

23.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District.

- High Fives Foundation
- Tahoe Truckee Community Foundation
- Friends of Olympic Valley
- Olympic Valley Property Owners Association
- Olympic Valley Firewise Community

23.5 Jurisdictional Capability Assessment

Olympic Valley PSD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Olympic Valley PSD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has limited authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the District or municipality where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

23.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 23-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 23-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Building Code **California Building Code** **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Fire Code **Title 24, Part 9** **January 1, 2026**	The California Fire Code is a comprehensive set of state regulations based on the International Fire Code (IFC) that establishes standards for life and property safety from fire and explosion hazards. It covers areas such as the storage and handling of hazardous materials, building construction, fire suppression systems, and conditions hazardous to life and property.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Water Code January 1, 2023	The California Water Code establishes regulations applied to water resources and water service providers in California. Hazard mitigation is addressed in Division 3 (Dams and Reservoirs), Division 5 (Flood Control), Division 6 (Conservation, Development, and Utilization of State Water Resources), and Division 28 (Wildfire Prevention and Recovery Act of 2019).	The District does not have the authority to expand or improve state codes.	California Department of Water Resources
Real Estate Disclosure	When properties sell a defensible space inspection is required.	-	Placer / OVFD
Other Code, Ordinance, or Regulation Related to Natural Hazards	Propane regulators must have a protective shed roof where they attach to a structure.	-	Placer /OVFD

23.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 23-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 23-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
OVPSD Master Plan, 2022	The Master Plan aligns land use and development policies with strategies that reduce risk from natural hazards.	-	OVPSD Admin
Capital Improvement Plan, 2016	This plan prioritizes infrastructure projects that enhance resilience and protect critical facilities from potential hazards.	-	OVPSD Admin
Community Wildfire Protection Plan, 2022	Developed in 2022 The plan works to increase wildfire safety for the district's residents and visitors while reducing the risk of loss of life and property. This is being done by completing fuels reduction in several zones around the community. The CWPP is integrated with the 2021 MJHMP.	In addition, OVFD has in place a defensible space inspection and public outreach program.	Fire Chief
Emergency Operations Plan, 2014	The plan covers a variety of emergencies within the community. Among these are wildfire response and escape corridors.	-	OVPSD Admin and Fire Chief

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments and positions noted as responsible in the table above will

be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

23.5.3 Development and Permitting Capability

OVPSD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

23.5.4 Administrative Capability

Table 23-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 23-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	The District maintains a Defensible Space Program and a Community Wildfire Protection Plan.
Mutual aid agreements	The District participates in the Tahoe Truckee Area Emergency Contingency Plan Fire Department Mutual Aid Agreement.
Human Resources Manual	The Olympic Valley PSD Human Resource manual identifies the Fire Chief as the lead for hazard mitigation projects.

23.5.5 Technical Capability

Table 23-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 23-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Staff with expertise or training in benefit/cost analysis	Finance Danielle Muller
Grant Managers and/or Writer(s)	Staff
GIS Coordinator/Analyst	District Engineer Dave Hunt

23.5.6 Fiscal Capabilities

Table 23-6 summarizes financial resources available to Olympic Valley PSD.

Table 23-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	The District uses capital improvement fund for fuels management.
User fees for water, sewer, gas, or electric service	Fees fund the Water and Sewer Asset replacement program.

Financial Resources	Description, Expansion, Improvement
Impact fees for homebuyers or developers of new development/homes	Fees fund the Fire Department Asset Replacement Program.
Incur debt through general obligation bonds	Available to district should such a vote be approved by residents.
Incur debt through special tax bonds	Available to district should such a vote be approved by residents.

23.5.7 Education and Outreach Capability

Table 23-7 summarizes the education and outreach resources available to Olympic Valley PSD.

Table 23-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Board Secretary Jessica Asher
Personnel skilled or trained in website development	Board Secretary Jessica Asher
Social media for hazard mitigation education and outreach	Nextdoor, Instagram, Facebook
Community newsletter	4x year Newsletter
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	Firewise Community Meetings, Social Media Posts, Nixle alert communications, Community forums.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	4x year Newsletter, social media, flyers and handouts, community meetings, community forums.

23.5.8 Community Classifications

Table 23-8 summarizes classifications for community programs available to Olympic Valley PSD.

Table 23-8. Community Classifications

Program	Participating?	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	2 in valley and 2Y in river corridor	2020 – Being updated in 2025-26
Firewise Communities classification	Yes	High Fire Risk	2020

23.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 23-9 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong—The jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.

- Moderate—Minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak—The jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 23-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Strong - OVFD is prepared to respond with trained personnel and specialized equipment, in addition the District has a working relationship with ski patrol who can contribute personnel and search dogs.
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Moderate – OVFD employees are trained in confined space rescue as well as Rescue Systems 1 and 2. E221 is Typed as a USAR Type 3 Rescue in California.
Flood	Strong - OVFD employees are trained in swift water rescue and have equipment to rescue affected persons. In addition, OVFD participates in the regional technical rescue team which would provide mutual aid.
Landslides, Mudslides, and Debris Flow	Weak. OVPSD offers sandbags during rain events.
Freeze and Snow	Moderate – OVFD employees regularly work in the snow and freezing temperatures. Employees are outfitted with winter clothing and train in winter conditions, including avalanche safety and recovery.
Heavy Rains and Storms	Moderate – OVPSD provides sand and sandbags for public use. OVFD utilizes the Nixle communication system to warn the community of impending heavy rain and storm events. OVFD is trained and equipped to respond to swift water rescue events.
High Winds and Tornadoes	Weak
Wildfire	Strong

23.6 National Flood Insurance Program

Olympic Valley PSD is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

23.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

23.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 23-3 through Figure 23-10. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Placer has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 23-3. Avalanche Hazard Area, Both Fire and Water

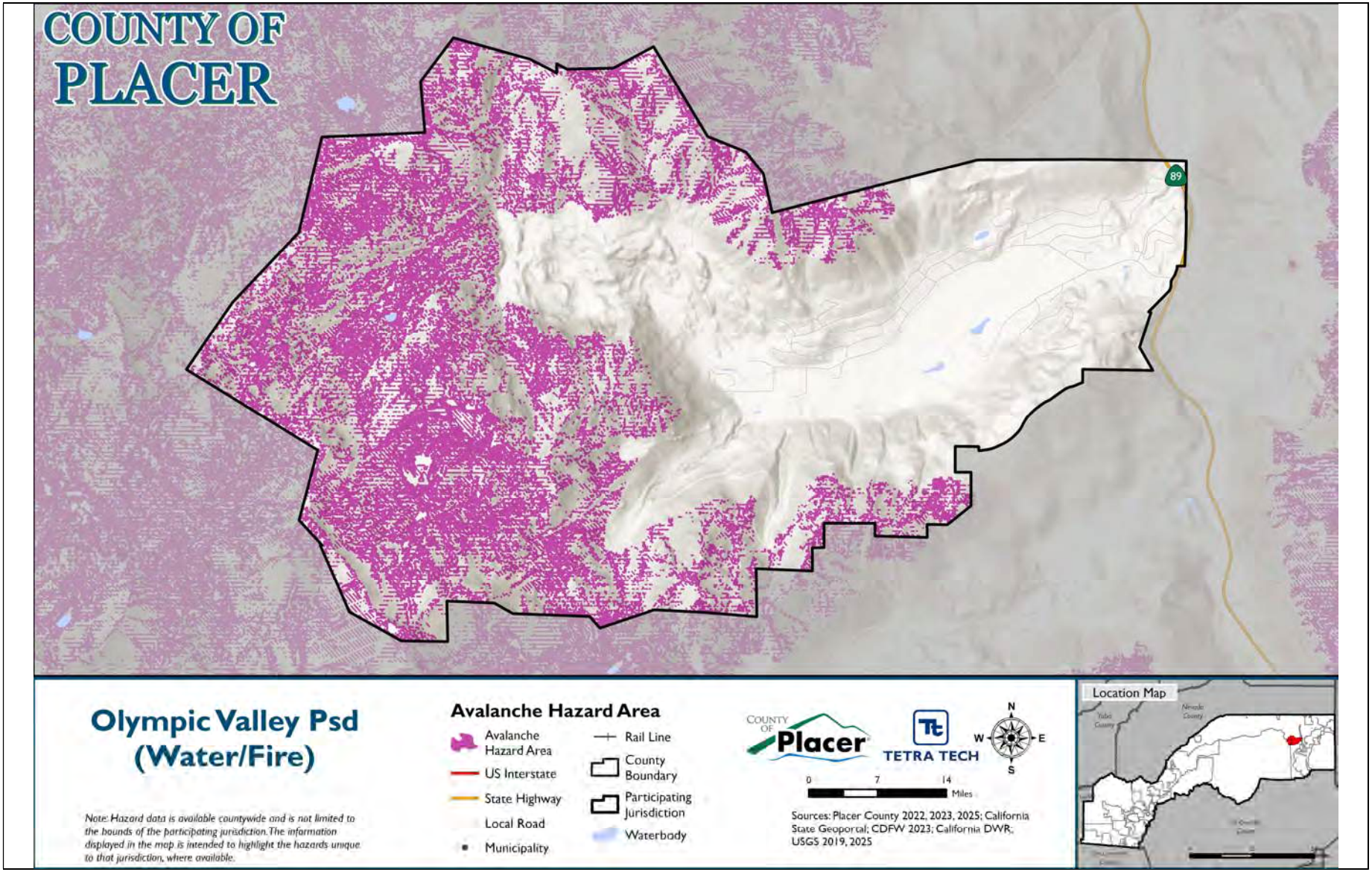


Figure 23-4. Avalanche Hazard Area, Fire Only

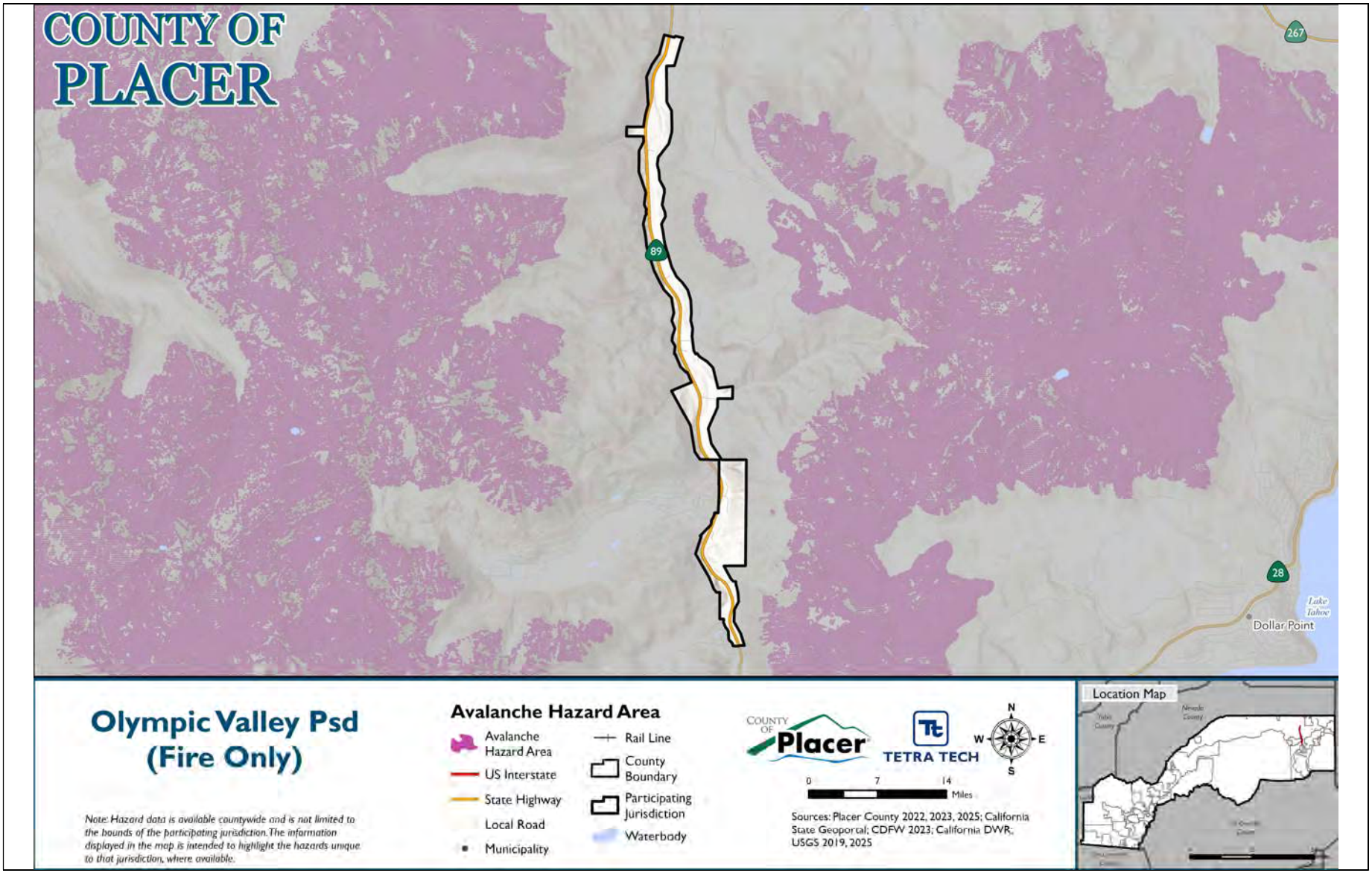


Figure 23-5. Flood Hazard Area, Both Water and Fire

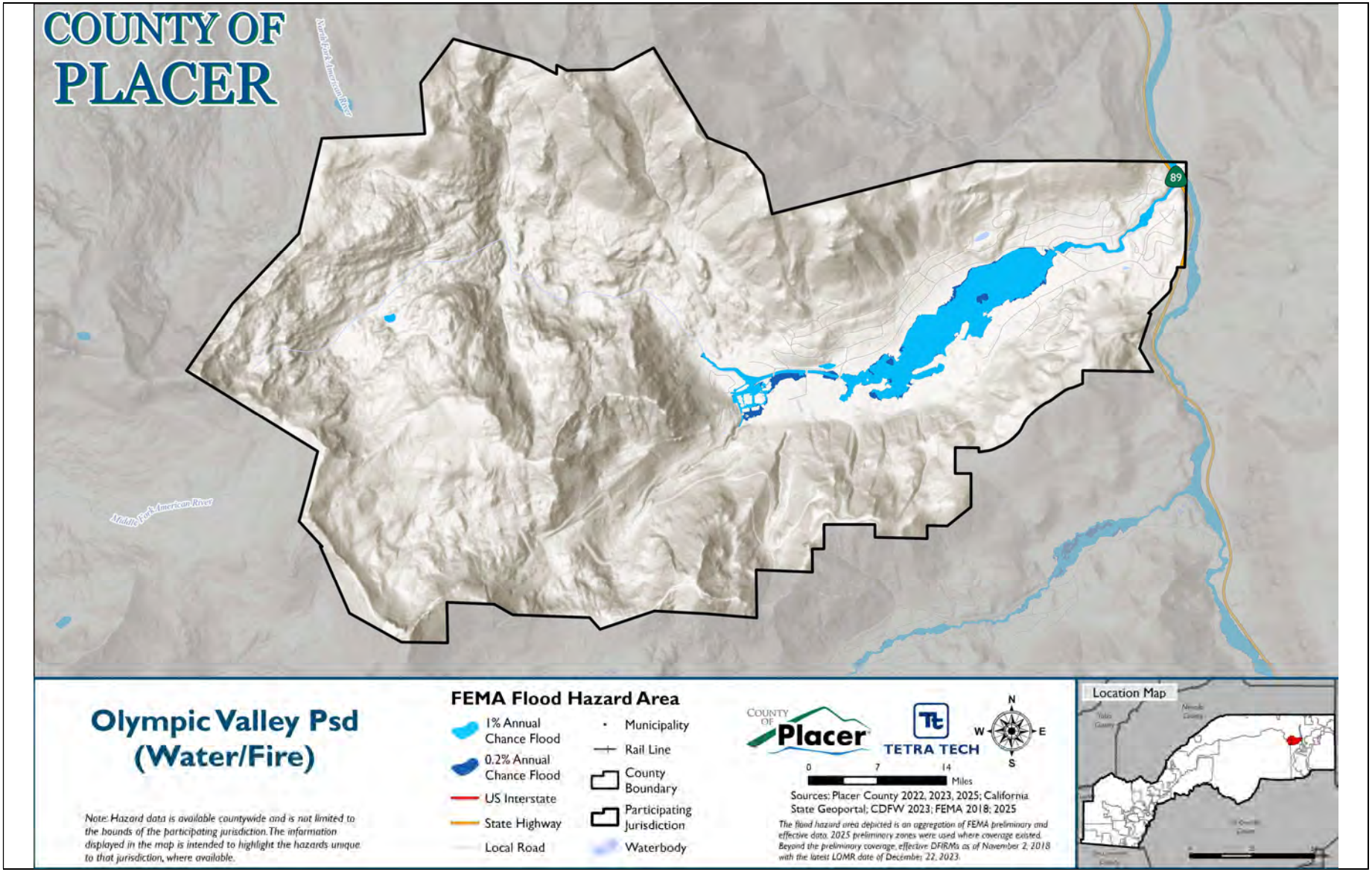


Figure 23-6. Flood Hazard Area, Fire Only

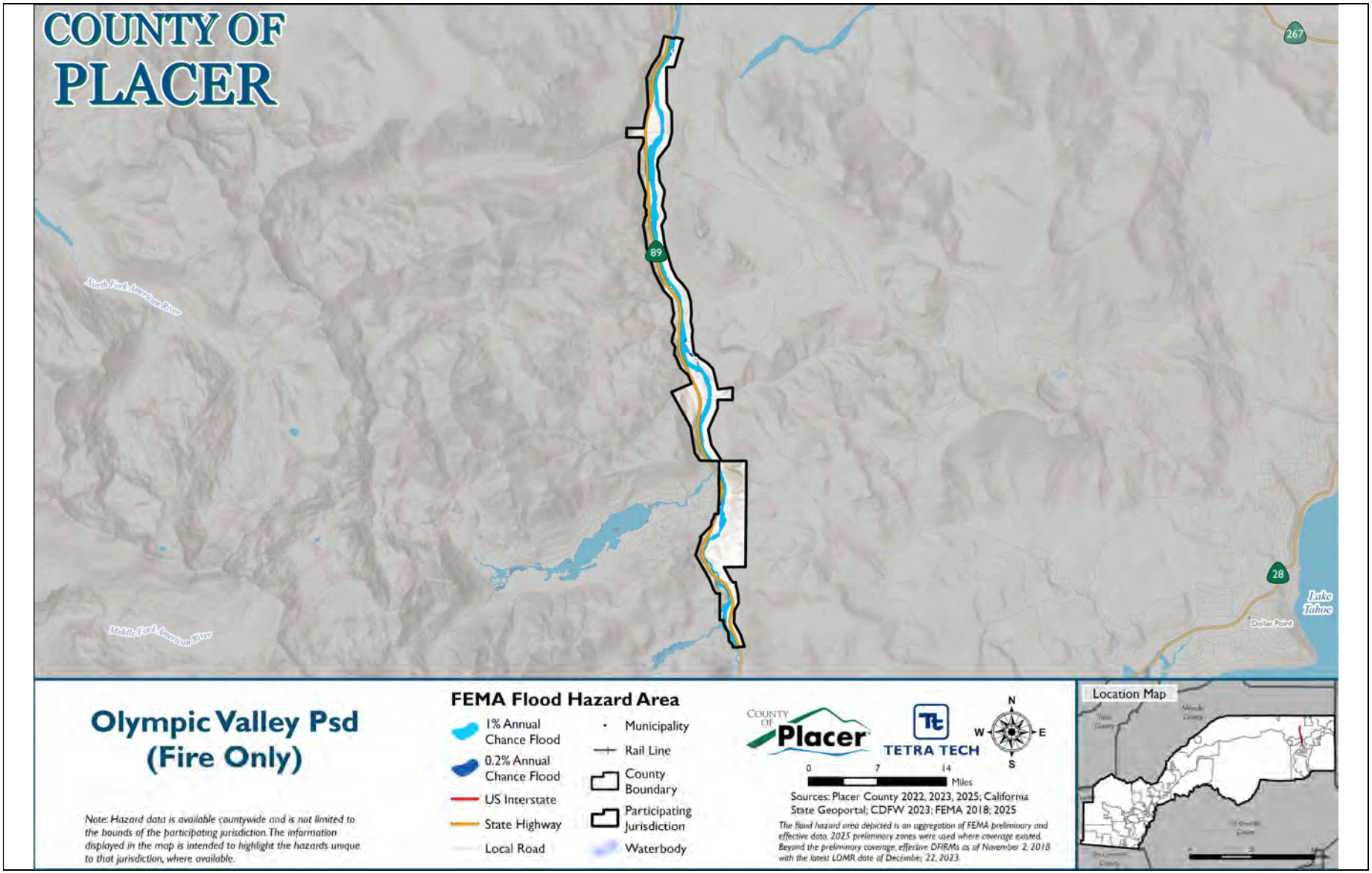


Figure 23-7. Landslide Hazard Area, Both Water and Fire

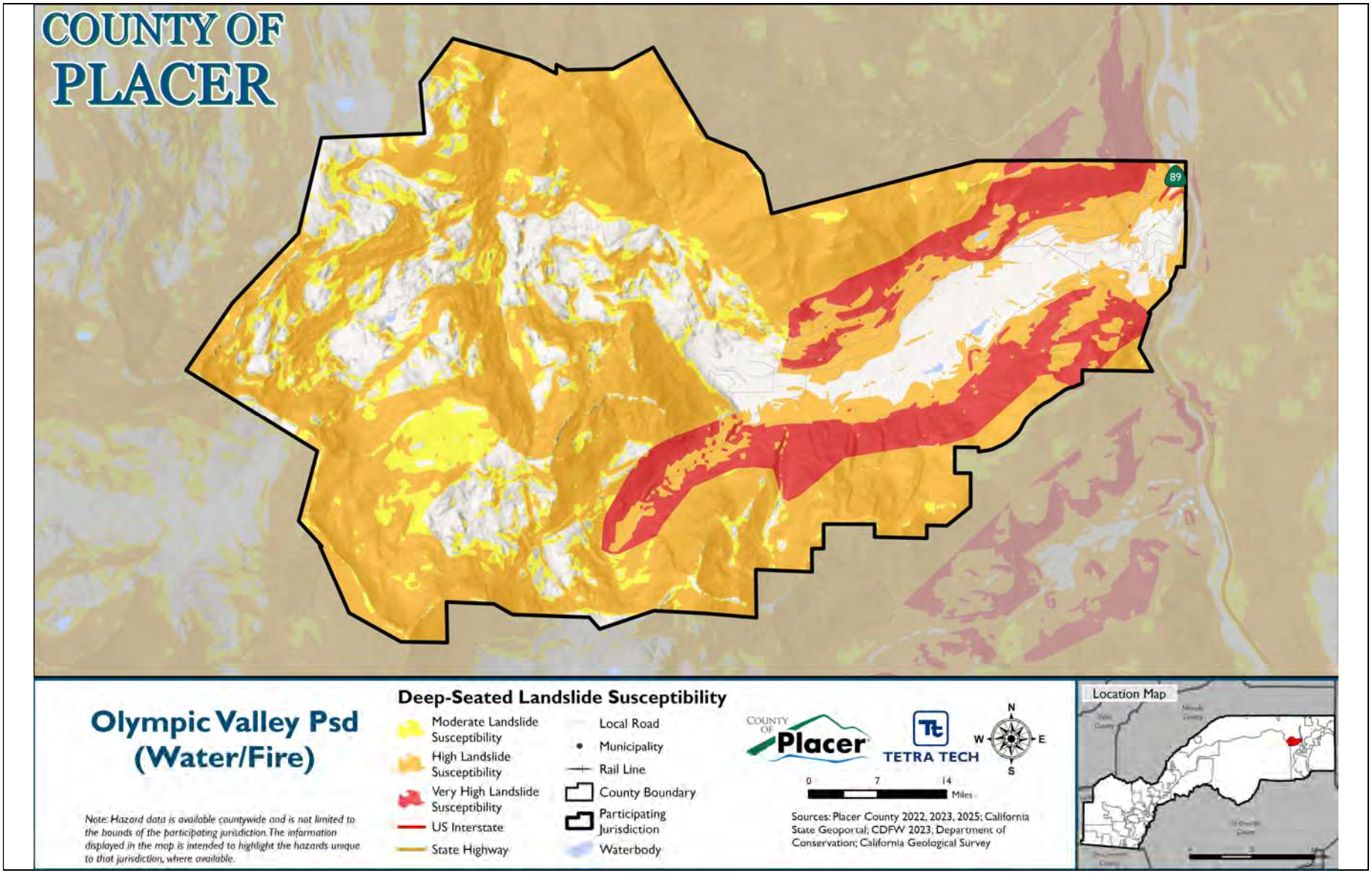


Figure 23-8. Landslide Hazard Area, Fire Only

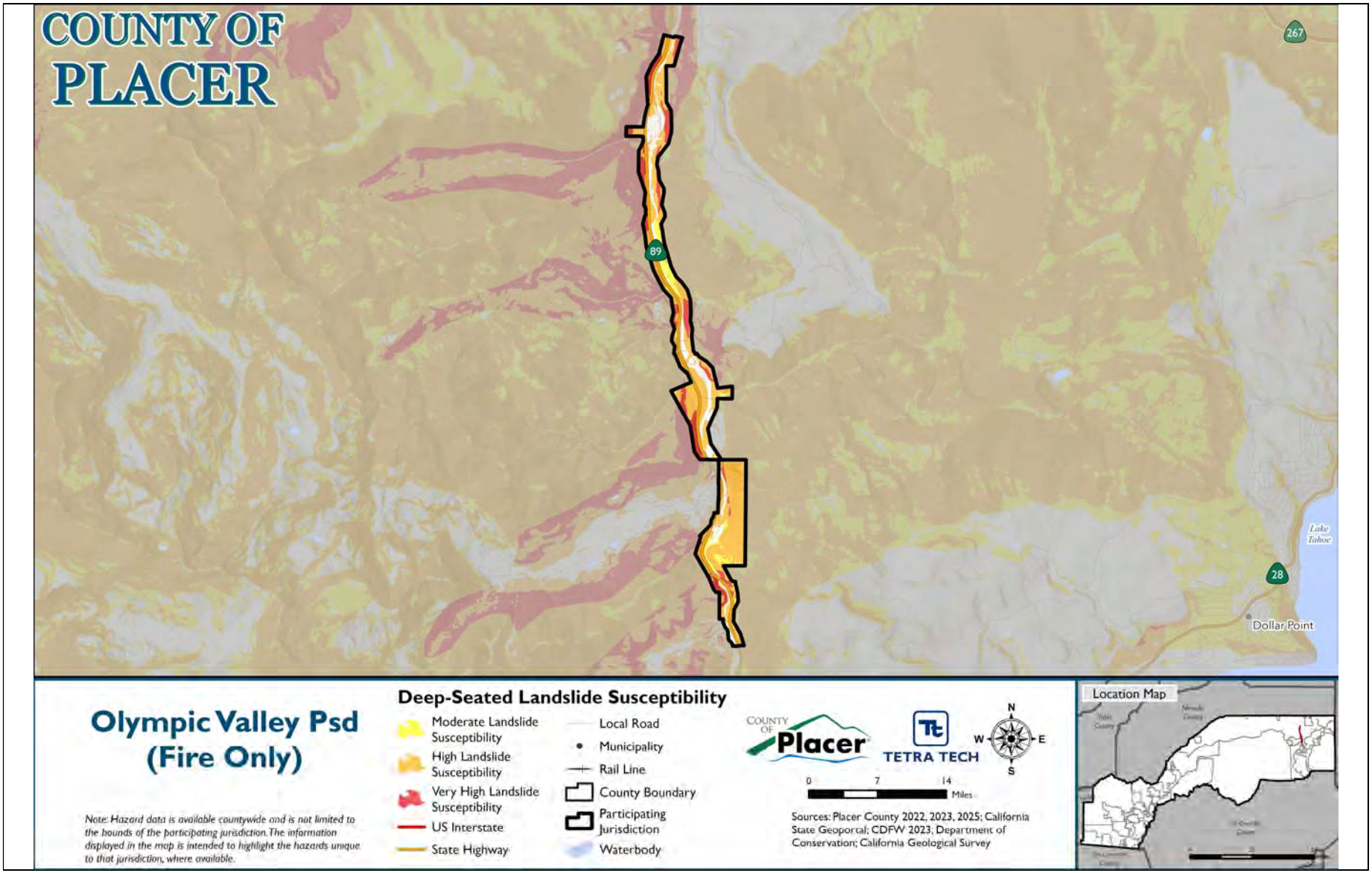


Figure 23-9. Wildfire Hazard Area, Both Water and Fire

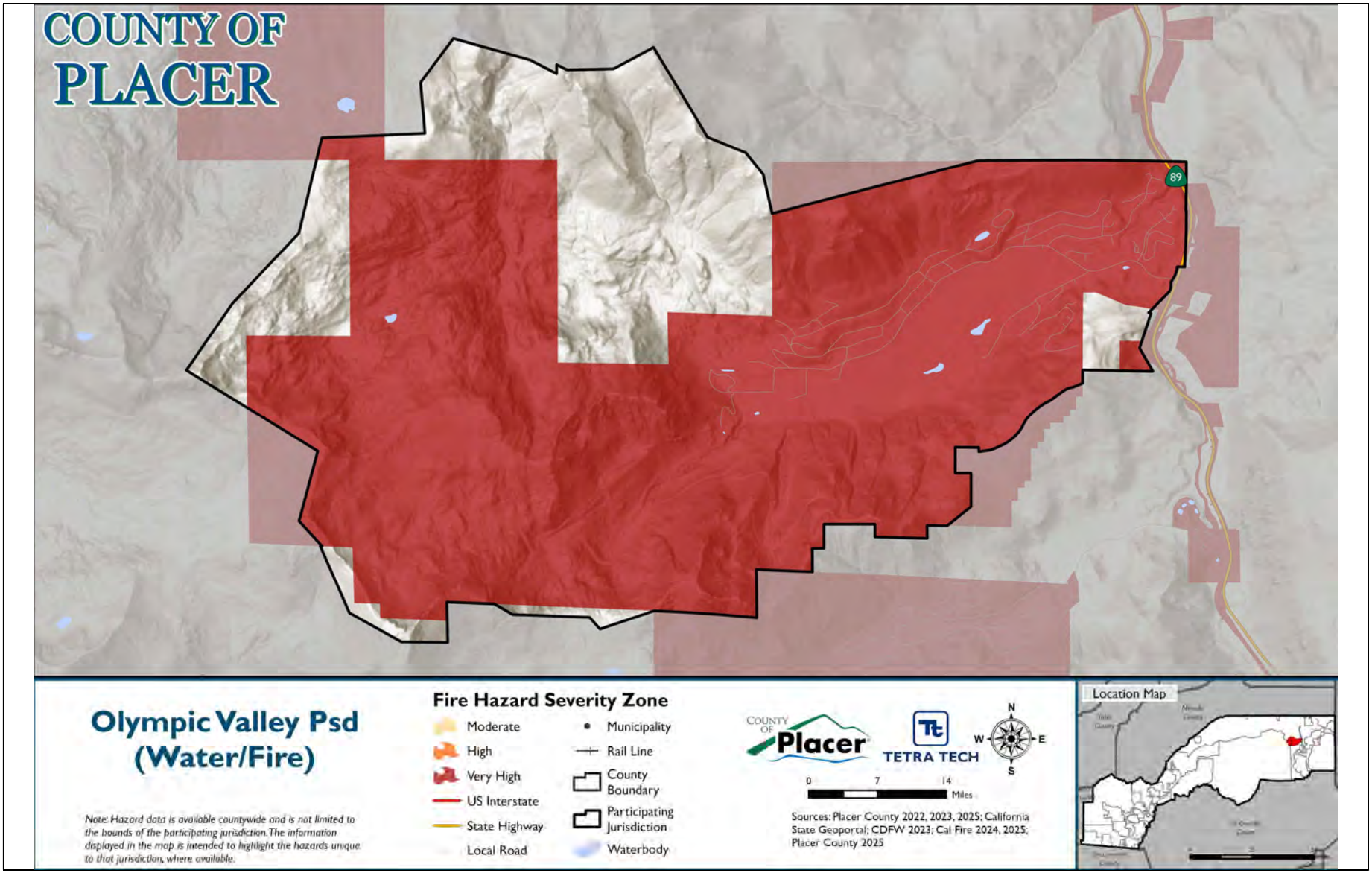
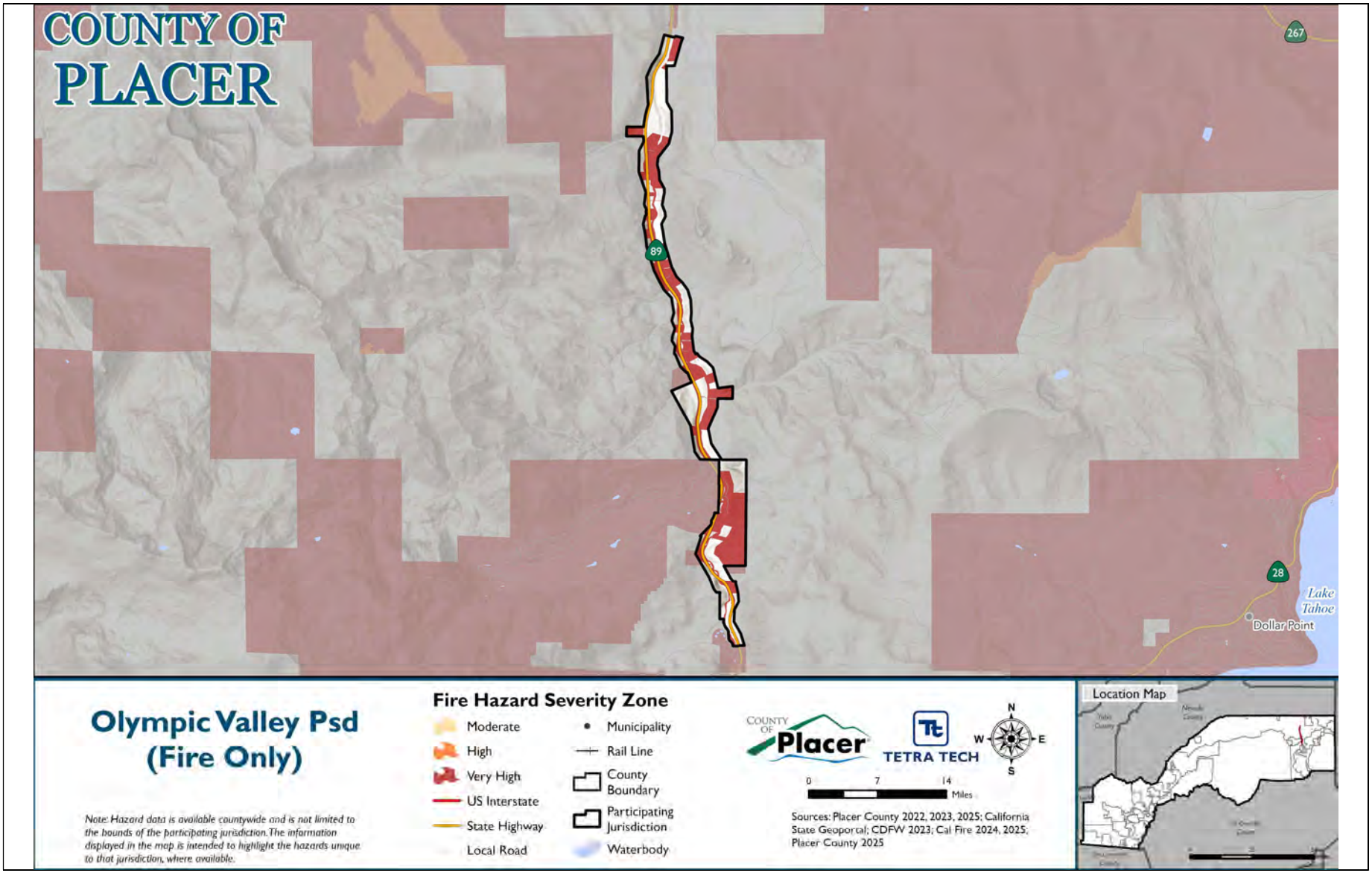


Figure 23-10. Wildfire Hazard Area, Fire Only



23.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 23-10 provides details on loss and damage in OVSPD during hazard events since the last hazard mitigation plan update.

Table 23-10. Hazard Event History in OVPSD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 13, 2021	December 13, 2021	High Wind, Winter Storm	A weather system brought winter weather to the Sierra Nevada and southern Cascades. Reports of 52 to 66 inches of new snow were received. Low elevation snow also occurred with snow accumulation reported down to approximately 2,500 feet in elevation in the western foothills of the Sierra Nevada. Chain controls were in place on Interstate 80 and Highway 50 during the event. Traffic was also briefly closed to through traffic on I-80 for 34 minutes on the 13th due to downed powerlines. A rockslide also closed state route 70 at 3:30 am on the 13th. Highway 49 was closed during the event due to a down tree. Power outages were also reported across the region. Several counties also opened warming centers for the cold temperatures. High winds caused a significant amount of trees and powerlines to fall across the area causing widespread power outages leading to tens of thousands of people left without power, roadways were closed and blocked, and dangerous driving conditions were observed including a vehicle struck by a powerline.	OVFD Responded with mutual aid to NTFPD for power lines down, no OT incurred.
December 21, 2021	December 28, 2021	Strong Wind	Several high impact winter storms impacted the region around the Christmas holiday. Widespread precipitation, low snow levels of 500 to 2500 feet, and strong and damaging winds resulted. Impacts ranged from fallen trees, downed power and phone lines, with widespread and extended outages, treacherous driving conditions including chain controls and extended highway closures due to wind and/or snow, multiple accidents and spin outs due to snow, damaged property due to snow and wind. Governor Gavin Newsom declared a state of emergency in 20 California counties due to the impacts from the series of storms. The affected areas include: El Dorado, Nevada, Placer, Sacramento and Yuba counties, but also Los Angeles and parts of the Bay Area. As of 12/29 1300 hours, Cal-OES estimated that the late December storm damages to roadway infrastructure total $22.2 million. Warming centers were also opened across the region for those impacted by the stormy weather	2 incidents of power lines down in this time period. No OT incurred.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	An avalanche slid into a three story building. Fire department evacuated several residents, secured utilities and the scene. Minimal OT incurred. Several residents were displaced until Placer County cleared the building for habitation.
March 27, 2023	March 29, 2023	Heavy Snow	A strong winter storm brought moderate to heavy rain with flooding of roadways, streams and creeks, with mudslides also reported. In the mountains there were wind gusts up to 50 to 70 mph, which coupled with heavy snow, brought whiteout conditions. The were numerous road closures, including Interstate 80, as well as State Routes 88, 89 and 299. Widespread trees down across the area blocked roads and caused power outages. Ski resorts reported storm total snow amounts of 23 inches at Kirkwood, 19 inches at Sugar Bowl, and 17 inches at Sierra at Tahoe. Caltrans District 3 reported storm total snow amounts of 23.5 inches at Kingvale, 21 inches at Soda Springs, and 18 inches at Eagle Lakes. The National Operational Hydrological Remote Sensing Center's gridded snowfall analysis estimated 6 to 30 inches over the west slope northern Sierra Nevada over 72 hours. 1 death was reported by broadcast media in Alta, CA where a man died from a collapsed snowbank, trapping him next to a generator and exposing him to carbon monoxide. Interstate 80 was closed intermittently on 3/28 due to winter weather conditions and multiple spinouts.	Icy roads, large truck stuck on steep hill without tire chains. Residential road blocked for several hours while a supervisor brought the crew chains from Reno. Non injury, no damage.
August 18, 2023	August 18, 2023	Hail	Monsoonal moisture with an unstable airmass caused afternoon mountain thunderstorms to develop over the Sierra. One of these thunderstorms brought hail as large as nickel size. The CHP reported a truck accident on Interstate 80 near Blue Canyon that they thought was due to heavy rain and hail. The truck rain into a guard rail and overturned. The public reported nickel size hail from a location 1 mile northeast of Blue Canyon, by Putt Lake.	Vegetation fire due to lighting strike. Less than 1 acre in size, Forest Service crews handled with the use of a helicopter, remote and inaccessible location.

23.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

OVPSD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- The hazard ranking for avalanche increased from low to medium because Olympic Valley has experienced avalanches in the past.
- For flood, the hazard ranking increased from low to medium due to past flooding that displaced and stranded residents.
- The hazard ranking for landslides, mudslides, and debris flow was reduced from medium to low because these events are infrequent and contained in specific areas with minimal population. OVPSD's response would be limited to isolating and denying entry to the area.

Table 23-11 shows the District's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 23-11. Hazard Ranking

Hazard	Rank
Avalanche	Medium
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Medium
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

23.7.4 Vulnerability Assessment

Table 23-12 lists issues related to the top hazards of concern for Placer. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 23-12. Hazard Issues

Issue	Related Hazard
The population of Olympic Valley can increase more than ten-fold over the course of several hours during a weekend. Presently, there is no way of effectively alerting most residents and visitors of a hazard and the actions to be taken in response. A community-wide emergency notification system could be implemented with relative ease and cost-efficiency in a compact area like Olympic Valley. Permanent, changeable message boards located along Olympic Valley Road at the west and east ends of the Valley could be used to alert residents and visitors of a hazard and refer them to the frequency for a low-power FM transmitter that would transmit more detailed information and recommended courses of action.	All Hazards: Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides, Mudslides, and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Upgrading the SCADA communication network and enhancing battery backup power will improve system reliability, operational efficiency, and resiliency during power interruptions, including those caused by planned outages during wildfire situations. This project is needed to ensure uninterrupted monitoring and control of critical water infrastructure during emergency conditions.	Drought and Water Shortage, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Currently, the District has only two existing flow meters capturing data. This limited monitoring makes it difficult to accurately identify where excessive inflow and infiltration (I&I) are occurring during rain events or flooding. Installing additional sewer flow meters in other basins will provide the detailed data needed to pinpoint problem areas, reduce I&I, and improve the overall efficiency and resilience of the sewer system during wet weather and flood conditions.	Flood, Heavy Rains and Storms
One way in and out of the valley.	All Hazards: Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides, Mudslides, and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, wildfire
Equipping the well on the west side of the aquifer will increase total pumping capacity and distribute extraction more evenly across the aquifer. This added capacity will improve system reliability, ensure adequate supply during peak demand or emergency conditions, and enhance overall resiliency of the District's water system.	Drought and Water Shortage, Wildfire

Issue	Related Hazard
When an overflow occurs, valuable time is lost gathering equipment and coordinating transport, which can delay containment and increase the risk of environmental contamination and public health impacts. This project will solve that problem by providing a fully outfitted Sanitary Sewer Overflow response trailer, allowing crews to quickly mobilize bypass equipment and containment tools. The project is needed to improve emergency response efficiency, reduce potential spill impacts, and strengthen both local and regional preparedness through mutual aid support.	Flood, Heavy Rains and Storms
The existing East Booster Pump Station relies on a single pump, creating a single point of failure for supplying water to the East Tank. This limitation reduces overall system reliability and operational flexibility. Replacing the station with dual booster pumps will eliminate this vulnerability by providing redundancy, ensuring continuous service during maintenance or pump failure, and increasing capacity to meet future demand and fire flow requirements.	Drought and Water Shortage, Wildfire
During the 1997 flood, the wastewater conveyance system in Olympic Valley sustained damage due to erosion in multiple locations. The Washeshu Creek Siphon, which conveys wastewater from approximately 200 homes across and under Washeshu Creek before connecting to the Olympic Valley Interceptor, was completely exposed when high-velocity floodwaters eroded the creek bed. Following the event, the District installed rock gabions upstream, downstream, and over the siphon to provide protection. The 1997 flood has been characterized by Placer County as a 50-year event; however, a similar or larger event could again threaten the siphon, potentially resulting in damage or failure and the release of wastewater into Washeshu Creek and the Truckee River. The Washeshu Creek Siphon Project proposes to replace the existing siphon with a larger, redundant siphon installed adjacent to and deeper than the current pipeline, improving system resilience and environmental protection.	Flood, Heavy Rains and Storms
Defensible Space creates a buffer to slow or stop wildfires from reaching a structure, and it increases the safety of firefighters who are defending the home. It creates a space between a house and the surrounding landscape, using a combination of vegetation management, non-combustible materials, and proper spacing to protect the property and its inhabitants.	Wildfire
"Community wildfire fuels reduction programs are undertaken to reduce wildfire risk through vegetation management, with the primary reason being to protect lives, property, and natural resources by creating defensible space and mitigating catastrophic fire behavior. Benefits include enhanced community safety, improved firefighter effectiveness, restored ecosystem health, and increased community resilience against future fires. These programs aim to alter fire behavior to be less severe, lessen post-fire damage"	Wildfire
OVFD works to educate the public about avalanche dangers via social media and Nixle messaging when conditions are elevated. OVFD possesses specialized equipment for avalanche response and trains all employees for these emergencies. OVFD maintains a working relationship with Ski Patrol who can provide additional trained personnel and trained search dogs in the event of an incident.	Avalanche
OVFD works to educate the public about heavy rainfall and possible flooding events via social media posts and Nixle messaging. OVPSD provides sand and sandbags for public use during periods of possible flooding. In addition, OVFD personnel are trained in swift water rescue and possess equipment required to execute rescues. OVFD participates in the Regional Technical Rescue team which would provide mutual aid in the event of an incident.	Flood, Heavy Rains and Storms

23.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 23-13 describes the potential impacts of the hazards of local concern to OVPSD (hazards identified as medium or high risk in Table 23-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 23-13. Hazard Impacts

Hazard	Potential Impacts
Avalanche	An avalanche impacted a three-story apartment building, requiring emergency response actions. The fire department assessed the threat, evacuated several residents, secured utilities, and stabilized the scene. Minimal overtime was incurred during the operation. Several residents were displaced until Placer County officials cleared the building and could assess for safe habitation. While no injuries were reported, the event caused temporary disruption and highlighted the need for continued monitoring of avalanche risks in developed areas.
Flood	The increase in flood hazard ranking from low to medium reflects a heightened risk to the community. Past flooding events that displaced and stranded residents demonstrate the potential for significant disruptions to safety, mobility, and access to essential services. Without effective mitigation measures, future flood events could lead to property damage, economic losses, and prolonged recovery efforts, emphasizing the need for targeted strategies to reduce vulnerability.
Wildfire	The entire District is designated by California State Fire Marshal as a Very High Fire Hazard Severity Zone. While the District maintains defensible space around facilities and utilizes wildfire mitigation best practices, there is the potential for a wildfire to damage facilities and equipment and endanger District personnel.

23.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect OVPSD's overall vulnerability since the previous plan was approved.

23.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

23.8.1 Changes in Community Priorities

OVPSD's priorities remain consistent, focusing on maintaining emergency preparedness, infrastructure resilience, and continuity of essential services. OVPSD continues to emphasize proactive measures that strengthen communication systems, safeguard critical resources, and support rapid recovery following emergencies. These ongoing priorities demonstrate a sustained commitment to reducing vulnerabilities and enhancing overall resilience against potential hazards.

23.8.2 Past Mitigation Action Status

Table 23-14 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 23-14. Status of Previous Mitigation Actions

Action No.	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	The population of Olympic Valley can increase more than ten-fold over the course of several hours on a Saturday morning. Presently, there is no way of effectively alerting most residents and visitors of a hazard and the actions to be taken in response. A community-wide emergency notification system could be implemented with relative ease and cost-efficiency in a compact area like Olympic Valley. Permanent, changeable message boards located along Olympic Valley Road at the west and east ends of the Valley could be used to alert residents and visitors of a hazard and refer them to the frequency for a low-power FM transmitter that would transmit more detailed information and recommended courses of action.	Community-Wide Emergency Notification System	Not Complete	Yes	-
2	The community of Olympic Valley draws its drinking water from a single source aquifer that is very small, unprotected and is very sensitive. Source water travels rapidly through the aquifer making contamination of the supply of deep concern. Prolonged or extended drought consistent with changing global weather patterns could lead to overdraft of the limited supply. Olympic Valley is geographically separate from outlying communities that may provide an emergency interconnection. A feasibility study conducted in 2009 determined that a connection to the Truckee Donner PUD or the Northstar CSD to be feasible with no fatal flaws in securing water rights, environmental constraints, or rights of way. The purpose of the project is to provide a redundant source of supply that is geographically diverse with a reliable means of delivery. The delivery system will provide water service and fire protection to outlying areas while providing a utility corridor for natural gas and high speed communication.	Emergency Water Supply Interconnection to Martis Valley	Not Complete	Yes	-
3	The community of Olympic Valley has 2 water purveyors that provide domestic water to its residents. An intertie enables both systems to support the other with water in case of an issue due to natural disaster or operational issues.	OVPSD/Mutual Water Company Intertie	Complete	No	Complete
4	During the 1997 flood the wastewater conveyance system in Olympic Valley was compromised due to erosion in multiple locations. The Washeshu Creek Siphon conveys wastewater from around 200 home across and under Washeshu Creek where it ties into the Squaw Valley Interceptor. High velocity flood waters cut downward and eroded the creek bottom in the 1997 flood completely exposing the Washeshu Creek Siphon. After the flood waters receded the District installed rock gabions upstream, downstream and over the Washeshu Creek Siphon to protect the pipeline. The 1997 flood has been characterized by Placer County as a 50 year event, a similar or larger event would potentially damage or wash away the Washeshu Creek Siphon causing wastewater to pollute Washeshu Creek and the Truckee River. The Washeshu Creek Siphon Project seeks to replace the existing siphon with a redundant and larger siphon adjacent to and deeper than the existing siphon.	Squaw Creek Siphon	Not Complete	Yes	-

Action No.	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
5	The District's East Tank (500,000 gal) was constructed in 1980 and is designed to withstand snow loads but not lateral stress from a substantial earthquake. The East tank is located up gradient from several single family homes that would be heavily impacted due to a tank failure. The Mutual Water Company Steel Tank (300,000 gal) is located adjacent to a wash that sustained mud flows in the 1997 flood that caused significant erosion of the tanks earth foundation pad. Both Mutual Water Company Tanks are located up gradient from numerous single family homes that would be heavily impacted due to a tank failure. The project would entail a seismic analysis by a qualified geotechnical firm of the Mutual water tanks and the Districts East Tank. Seismic retro-fit would be designed and employed of deemed necessary.	Water Tank Earthquake Retrofit Projects	Not Complete	Yes	-
6	One way in and out of the valley	Easement Abatement/ Maintenance of Emergency Access	Not Complete	Yes	-
7	Olympic Valley PSD has a booster station that does not have an onsite generator. Currently a towable generator would be rented for a prolonged power outage. Purchasing a towable generator sized to run the booster station would increase resiliency of the water system for many kinds of disasters.	Towable Generator for Powering Booster Stations	Complete	No	Complete
8	The community of Olympic Valley draws its drinking water from a single source aquifer that is very small, unprotected and is very sensitive. Source water travels rapidly through the aquifer making contamination of the supply of deep concern. Prolonged or extended drought consistent with changing global weather patterns could lead to overdraft of the limited supply. Olympic Valley is geographically separate from outlying communities that may provide an emergency interconnection. A feasibility study conducted in 2009 determined that a connection to the Truckee Donner PUD or the Northstar CSD to be feasible with no fatal flaws in securing water rights, environmental constraints, or rights of way. The purpose of the project is to provide a redundant source of supply that is geographically diverse with a reliable means of delivery. The delivery system will provide water service and fire protection to outlying areas while providing a utility corridor for natural gas and high speed communication.	Emergency Water Supply Interconnecti on to Martis Valley	Not Complete	No	Repeat of item #2 above

23.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, Olympic Valley PSD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- The Olympic Valley Community Wildfire Protection Plan (CWPP) was adopted in 2022. The plan designated five fuels reduction projects in and around the community of Olympic Valley, CA. As of December 2025, three of the five fuels reductions projects have been completed. The remaining projects are either awaiting grant funding or have been awarded with implementation to begin Spring of2026.

23.8.4 Hazards Omitted from Mitigation Strategy

All hazards profiled in this MJHMP were included in the District's mitigation strategy.

23.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Olympic Valley PSD would like to pursue in the future to reduce the risk from hazards.

Table 23-15 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 23-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	X	-	X
Dam and Levee Failure	-	X	-	X
Drought and Water Shortage	-	X	-	X
Earthquake	X	X	-	X
Flood	-	X	-	X
Freeze and Snow	-	X	-	X
Heavy Rains and Storms	-	X	-	X
High Winds and Tornadoes	-	X	-	X
Landslides, Mudslides, and Debris Flows	-	X	-	X
Wildfire	-	X	X	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 23-16 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 23-16. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
OVPSD-01	Defensible Space Inspection Program	7	1-5 Years	High	Low	9.75	High
OVPSD-02	Flood Education and Awareness	6	1-5 Years	High	Low	9.5	High
OVPSD-03	Avalanche Education and Awareness	5	1-5 Years	High	Low	9.25	High
OVPSD-04	Emergency Notification System	6	1-10 Years	High	Low	8.5	High
OVPSD-05	Fuels Reduction	6	1-5 Years	High	High	7.5	Medium
OVPSD-06	Easement Abatement/ Maintenance of Emergency Access	5	1-5 Years	High	High	7.25	Medium
OVPSD-07	SCADA Capabilities	4	1-5 Years	Medium	Medium	7	Medium
OVPSD-08	Sewer Metering	4	1-5 Years	Medium	Medium	7	Medium
OVPSD-09	Sewer Bypass Trailer	4	1-5 Years	Medium	Medium	7	Medium
OVPSD-10	Plump Jack Well	4	1-5 Years	Medium	High	6	Medium
OVPSD-11	Washeshu Creek Siphon	4	1-10 Years	Medium	High	5	Low
OVPSD-12	Water Tank Earthquake Retrofit	4	1-10 Years	Medium	High	5	Low
OVPSD-13	East Booster Pump Station Upgrade	4	1-10 Years	Medium	High	5	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

23.8.6 Mitigation Strategy

Table 23-17 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 23-17. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
OVPSD-01	Defensible Space Inspection Program	This project involves developing a public education and awareness program about defensible space and wildfire mitigation. OVFD has a defensible space inspection program in which every property within the district receives a defensible space inspection once a year. Completed inspections are provided to the property owner with pictures of violations and explanations of what is required for compliance. Defensible Space creates a buffer to slow or stop wildfires from reaching a structure, and it increases the safety of firefighters who are defending the home. It creates a space between a house and the surrounding landscape, using a combination of vegetation management, non-combustible materials, and proper spacing to protect the property and its inhabitants	Wildfire	Olympic Valley Fire Department	Olympic Valley Public Service Department	Annual Budget
OVPSD-02	Flood Education and Awareness	OVFD works to educate the public about heavy rainfall and possible flooding events via social media posts and Nixle messaging. OVPSD provides sand and sandbags for public use during periods of possible flooding. In addition, OVFD personnel are trained in swift water rescue and possess equipment required to execute rescues. OVFD participates in the Regional technical Rescue team which would provide mutual aid in the event of an incident.	Flood, Heavy Rains and Storms	Olympic Valley Fire Department	Olympic Valley Public Service Department, Placer County Office of Emergency Services	Annual Budget
OVPSD-03	Avalanche Education and Awareness	OVFD works to educate the public about avalanche dangers via social media and Nixle messaging when conditions are elevated. OVFD possesses specialized equipment for avalanche response and trains all employees for these emergencies. OVFD maintains a working relationship with Ski Patrol who can provide additional trained personnel and trained search dogs in the event of an incident.	Avalanche	Olympic Valley Fire Department	Olympic Valley Public Service Department, Placer County Office of Emergency Services	Annual Budget

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
OVPSD-04	Emergency Notification System	The District will implement a community-wide emergency notification system including, but not limited to, installing permanent, changeable message boards along Olympic Valley Road at the west and east ends of the Valley to alert residents and visitors of a hazard and refer them to the frequency for a low-power FM transmitter that would transmit more detailed information and recommended courses of action.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Olympic Valley Fire Department	Olympic Valley Public Service Department	FEMA Hazard Mitigation Grant Program
OVPSD-05	Fuels Reduction	This project involves actions to reduce dry vegetation that may fuel wildfires. Community wildfire fuels reduction programs are undertaken to reduce wildfire risk through vegetation management, with the primary reason being to protect lives, property, and natural resources by creating defensible space and mitigating catastrophic fire behavior. Benefits include enhanced community safety, improved firefighter effectiveness, restored ecosystem health, and increased community resilience against future fires. These programs aim to alter fire behavior to be less severe, lessen post-fire damage	Wildfire	Olympic Valley Fire Department	Olympic Valley Public Service Department	CAL FIRE Wildfire Resilience Grants, Coalitions and Collaboratives Action Implementation and Mitigation Grant Program
OVPSD-06	Easement Abatement and Maintenance of Emergency Access	This project consists of the abatement and ongoing maintenance of emergency access roads and utility easements to ensure clear, safe, and reliable access. Work includes removal of encroachments, vegetation management, and minor surface improvements as necessary to maintain unobstructed access for emergency response vehicles and utility maintenance activities.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Landslides, Mudslides, and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Olympic Valley Public Service Department	Olympic Valley Fire Department, Placer County Public Works, Caltrans	FEMA Hazard Mitigation Grant Program, Caltrans Sustainable Communities Grant Program, CAL FIRE Wildfire Prevention Grants, USDOT Promoting Resilient Operations Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
OVPSD-07	SCADA Capabilities	SCADA is the system that controls the operation of the water system. Since its original installation, there have been significant advancements in technology. This project will focus on improving communication capabilities and enhancing battery backup power across District infrastructure.	Drought and Water Shortage, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Olympic Valley Public Service Department	California Department of Water Resources	Water Fixed Asset Replacement Fund, FEMA Hazard Mitigation Grant Program, USDA Water and Waste Disposal Loan and Grant Program
OVPSD-08	Sewer Metering	The Sewer Collection System currently has two flow meters: one measuring sewer flows through the Washeshu Creek Siphon and another through the Truckee River Siphon. This project would add additional sewer flow meters to monitor flows from other sewer basins. The data collected will help us better understand inflow and infiltration during rain events or flooding and guide targeted mitigation efforts within the sewer system.	Flood, Heavy Rains and Storms	Olympic Valley Public Service Department	Placer County Flood Control, California Department of Water Resources	Sewer capital improvement program, FEMA Hazard Mitigation Grant Program, USDA Water and Waste Disposal Loan and Grant Program, California Department of Water Resources Floodplain Management, Protection, and Risk Awareness Grant Program
OVPSD-09	Sewer Bypass Trailer	This project is to outfit a Sanitary Sewer Overflow response trailer. This will quicken the response of sewer bypass equipment to a sewer overflow. This will be available to respond within district and regionally with local cooperators.	Flood, Heavy Rains and Storms	Olympic Valley Public Service Department	California Department of Water Resources	Sewer capital improvement program, FEMA Hazard Mitigation Grant Program, USDA Water and Waste Disposal Loan and Grant Program, California Department of Water Resources Floodplain Management, Protection, and Risk Awareness Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
OVPSD-10	Plump Jack Well	The District has an unequipped well located on the west side of the aquifer. This project would equip that well to provide a 400+ GPM water source, replacing the aging ~120 GPM Well 3. Equipping this well will distribute pumping demand more evenly across the aquifer while providing a net increase in overall pumping capacity.	Drought and Water Shortage, Wildfire	Olympic Valley Public Service Department	Placer County Flood Control, California Department of Water Resources	Water capital improvement program, FEMA Hazard Mitigation Grant Program, USDA Water and Waste Disposal Loan and Grant Program
OVPSD-11	Washeshu Creek Siphon	The Washeshu Creek Siphon Project proposes to replace the existing siphon with a larger, redundant siphon installed adjacent to and deeper than the current pipeline, improving system resilience and environmental protection.	Flood, Heavy Rains and Storms	Olympic Valley Public Service Department	Placer County Flood Control, California Department of Water Resources	Sewer Fixed Asset Replacement Fund, FEMA Hazard Mitigation Grant Program
OVPSD-12	Water Tank Earthquake Retrofit	This project would involve a seismic analysis of the District's East Tank by a qualified geotechnical engineering firm. If deemed necessary, a seismic retrofit would be designed and implemented to improve the tank's structural resilience and public safety.	Earthquake	Olympic Valley Public Service Department	Cal OES	Water capital improvement funds, FEMA Hazard Mitigation Grant Program
OVPSD-13	East Booster Pump Station Upgrade	The East Booster Pump Station currently operates with a single 220 GPM booster pump. This project would replace the existing station with dual booster pumps, increasing pumping capacity to the East Tank and improving system reliability.	Drought and Water Shortage, Wildfire	Olympic Valley Public Service Department	California Department of Water Resources	Water Fixed Asset Replacement Fund, FEMA Hazard Mitigation Grant Program, USDA Water and Waste Disposal Loan and Grant Program

24. Penryn Fire Protection District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in Penryn Fire Protection District (Penryn FPD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Penryn FPD, describes who participated in the planning process, assesses Penryn FPD 's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Penryn FPD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

24.1 Hazard Mitigation Planning Team

Penryn FPD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Mark D'Ambrogi, Assistant Chief
Address: P.O. Box 350 Meadow Vista, CA 95722
Phone Number: 530-878-0405 ext. 205
Email: dambrogi@placerhillsfire.org

Alternate Point of Contact: John Williamson, Battalion Chief
Address: P.O. Box 350 Meadow Vista, CA 95722
Phone Number: 530-878-0405
Email: jwilliamson@placerhillsfire.org

The Assistant Chief represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development through conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 24-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 24-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Mark D'Ambrogi	Penryn FPD	Assistant Chief	Primary point of contact for all planning activities
John Williamson	Penryn FPD	Battalion Chief	Secondary point of contact for all planning activities
Michelle Armstrong	Penryn FPD	District Manager	Supported worksheet completion and draft document review
Rhia Fairchild	Penryn FPD	Administrative Assistant	Supported worksheet completion and draft document review
Ian Gow	Penryn FPD	Fire Chief	Review draft documents and provide feedback

24.2 Community Profile

The Penryn FPD is located 30 miles east of Sacramento along Interstate 80 at the base of the Sierra foothills. Covering 10.5 square miles at approximately 620 feet above sea level, the district serves nearly 6,000 residents, 1,410 homes, and 118 businesses. It also provides protection for major transportation routes, including Interstate 80, Union Pacific rail lines, and an underground petroleum pipeline.

The District responds to more than 650 calls annually, with approximately 70 percent being medical emergencies and the remaining 30 percent primarily fire-related. Through automatic and mutual aid agreements with neighboring jurisdictions, the district ensures efficient and effective service to the community.

The fire station, located at 7206 Church Street in the center of Penryn, is staffed 24 hours a day by two qualified personnel, supported by Intern Firefighters. The Intern Program, established in 1995, allows individuals aged 18 and older to work alongside paid staff on a scheduled basis, enhancing the district's response capabilities.

Personnel within the District bring specialized expertise in areas such as incident command, hazardous materials, swift water rescue, advanced rescue systems, fire prevention, plan review, inspections, and safety training.

Founded in 1924 by the Farm Bureau, the Penryn FPD has a long-standing tradition of professionalism and community involvement. The District emphasizes training, prevention, and public education to safeguard lives and property. Community members are encouraged to visit the station or reach out with questions, as staff are always happy to assist (Penryn Fire Protection District 2025).

Currently the Penryn FPD has an agreement with Placer Hills FPD for Administrative Services that include: A Fire Chief, District Manager, Fire Marshal services, and Battalion Chief coverage.

24.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Penryn FPD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

24.3.1 Outreach Activities

Penryn FPD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District posted printed MJHMP materials on their public notice board at Fire Station 38. In addition, the District posted information about the MJHMP, hazard mitigation public survey, and Hazard Mitigation Planning Committee meetings on their website. Finally, the District maintains a standing MJHMP agenda item at its monthly Board meetings, providing the public an opportunity to attend and engage. This forum also enables staff to deliver status updates on the MJHMP process to the District's elected officials. The District's outreach efforts are shown in Figure 24-1 through Figure 24-3.

24.3.2 Public Feedback Integration

Public input was collected at the monthly Board meetings where status of the planning process was provided and public comment was taken from those in attendance. The most common concerns expressed were regarding wildfire and the Fire Districts' capabilities to respond to such events. Evacuation was also a big concern for citizens with potential new development coming into the area.

These insights were used to adjust the hazard rankings in the plan, ensuring that the final rankings reflected not only technical data but also the lived experiences and concerns of the community.

Figure 24-1. Printed Flyer on Posting Board, Fire Station 38

Figure 24-2. Website Postings

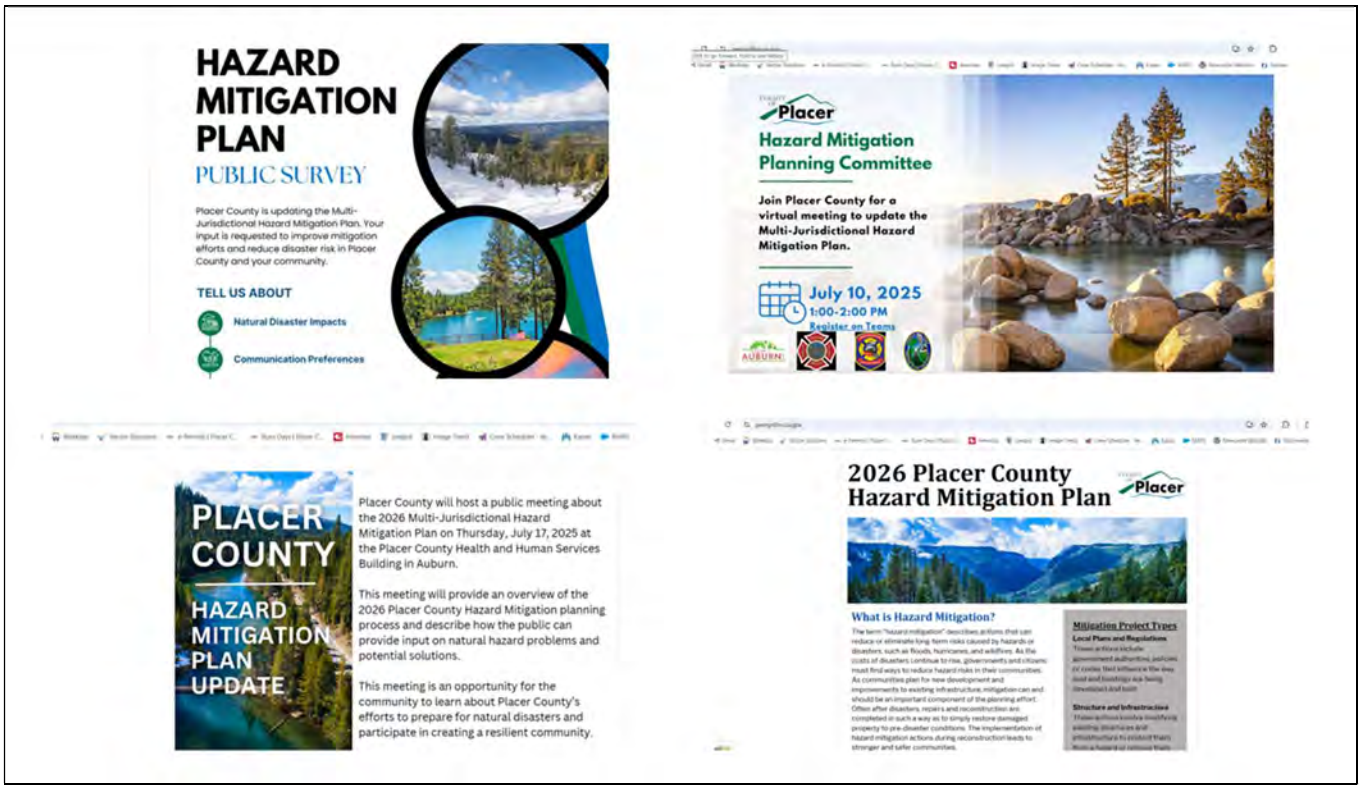
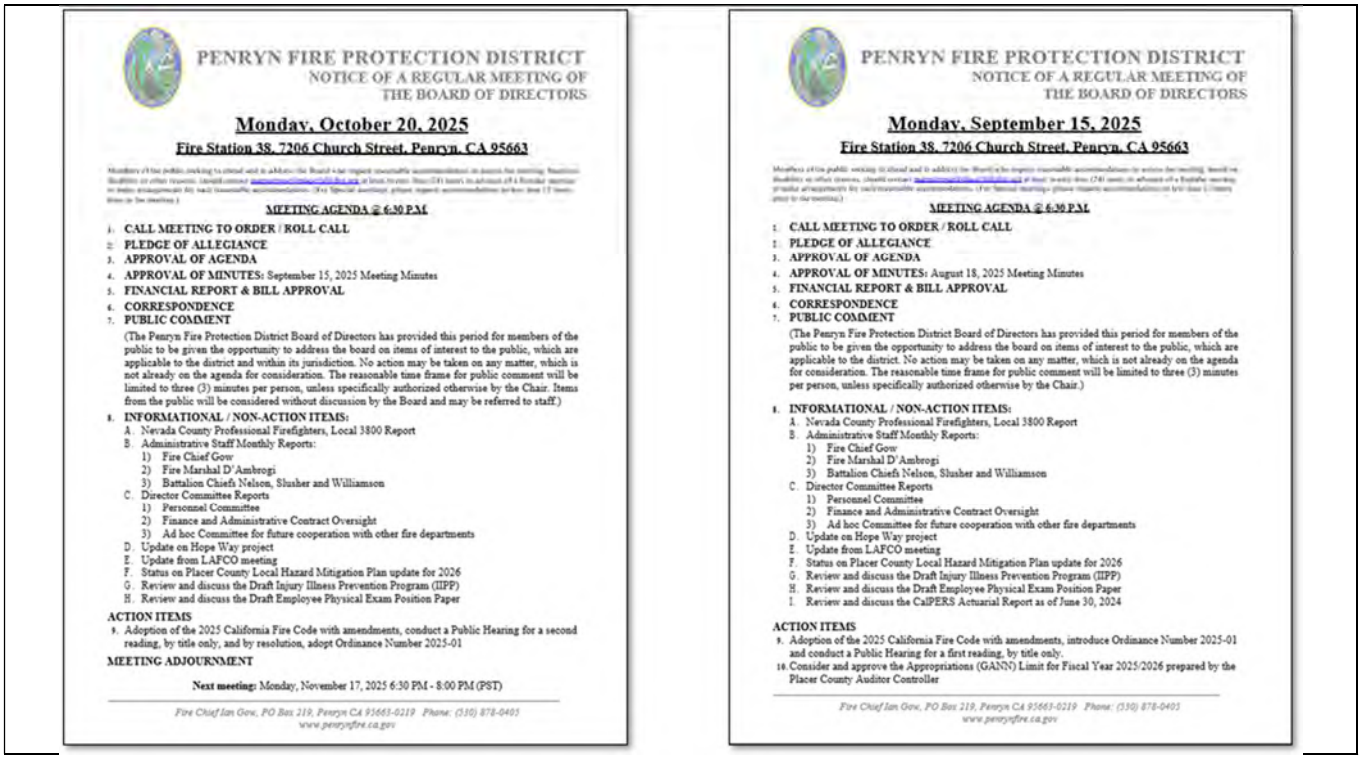


Figure 24-3. Public Board of Directors Meeting, September and October 2025



PENRYN FIRE PROTECTION DISTRICT
NOTICE OF A REGULAR MEETING OF
THE BOARD OF DIRECTORS

Monday, October 20, 2025

Fire Station 38, 7206 Church Street, Penryn, CA 95663

MEETING AGENDA @ 6:30 P.M.

1. CALL MEETING TO ORDER / ROLL CALL
2. PLEDGE OF ALLEGIANCE
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES: September 15, 2025 Meeting Minutes
5. FINANCIAL REPORT & BILL APPROVAL
6. CORRESPONDENCE
7. PUBLIC COMMENT

(The Penryn Fire Protection District Board of Directors has provided this period for members of the public to be given the opportunity to address the board on items of interest to the public, which are applicable to the district and within its jurisdiction. No action may be taken on any matter, which is not already on the agenda for consideration. The reasonable time frame for public comment will be limited to three (3) minutes per person, unless specifically authorized otherwise by the Chair. Items from the public will be considered without discussion by the Board and may be referred to staff.)

8. INFORMATIONAL / NON-ACTION ITEMS:
   A. Nevada County Professional Firefighters, Local 3800 Report
   B. Administrative Staff Monthly Reports:
      1) Fire Chief Gow
      2) Fire Marshal D'Ambrogi
      3) Battalion Chiefs Nelson, Slusher and Williamson
   C. Director Committee Reports
      1) Personnel Committee
      2) Finance and Administrative Contract Oversight
      3) Ad hoc Committee for future cooperation with other fire departments
   D. Update on Hope Way project
   E. Update from LAFCO meeting
   F. Status on Placer County Local Hazard Mitigation Plan update for 2026
   G. Review and discuss the Draft Injury Illness Prevention Program (IIPP)
   H. Review and discuss the Draft Employee Physical Exam Position Paper

ACTION ITEMS

9. Adoption of the 2025 California Fire Code with amendments, conduct a Public Hearing for a second reading, by title only, and by resolution, adopt Ordinance Number 2025-01

MEETING ADJOURNMENT

Next meeting: Monday, November 17, 2025 6:30 PM - 8:00 PM (PST)

Fire Chief Ian Gow, PO Box 219, Penryn CA 95663-0219 Phone: (530) 878-0405
www.penrynfire.ca.gov

PENRYN FIRE PROTECTION DISTRICT
NOTICE OF A REGULAR MEETING OF
THE BOARD OF DIRECTORS

Monday, September 15, 2025

Fire Station 38, 7206 Church Street, Penryn, CA 95663

MEETING AGENDA @ 6:30 P.M.

1. CALL MEETING TO ORDER / ROLL CALL
2. PLEDGE OF ALLEGIANCE
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES: August 18, 2025 Meeting Minutes
5. FINANCIAL REPORT & BILL APPROVAL
6. CORRESPONDENCE
7. PUBLIC COMMENT

(The Penryn Fire Protection District Board of Directors has provided this period for members of the public to be given the opportunity to address the board on items of interest to the public, which are applicable to the district. No action may be taken on any matter, which is not already on the agenda for consideration. The reasonable time frame for public comment will be limited to three (3) minutes per person, unless specifically authorized otherwise by the Chair.)

8. INFORMATIONAL / NON-ACTION ITEMS:
   A. Nevada County Professional Firefighters, Local 3800 Report
   B. Administrative Staff Monthly Reports:
      1) Fire Chief Gow
      2) Fire Marshal D'Ambrogi
      3) Battalion Chiefs Nelson, Slusher and Williamson
   C. Director Committee Reports
      1) Personnel Committee
      2) Finance and Administrative Contract Oversight
      3) Ad hoc Committee for future cooperation with other fire departments
   D. Update on Hope Way project
   E. Update from LAFCO meeting
   F. Status on Placer County Local Hazard Mitigation Plan update for 2026
   G. Review and discuss the Draft Injury Illness Prevention Program (IIPP)
   H. Review and discuss the Draft Employee Physical Exam Position Paper
   I. Review and discuss the CalPERS Actuarial Report as of June 30, 2024

ACTION ITEMS

9. Adoption of the 2025 California Fire Code with amendments, introduce Ordinance Number 2025-01 and conduct a Public Hearing for a first reading, by title only.
10. Consider and approve the Appropriations (GANN) Limit for Fiscal Year 2025/2026 prepared by the Placer County Auditor Controller

Fire Chief Ian Gow, PO Box 219, Penryn CA 95663-0219 Phone: (530) 878-0405
www.penrynfire.ca.gov

24.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

24.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County. In addition, all these agencies work collectively during large incidents.

- CAL FIRE
- Placer County Office of Emergency Services.
- Placer County Sheriff's Office

24.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. The District actively works with the Placer County Planning and Building Departments on a consistent basis.

- Placer County Building Department
- Placer County Community Development Resource Agency & Planning Services

24.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District.

- Newcastle FPD
- Placer County
- Placer Hills FPD
- South Placer FPD
- Town of Loomis

24.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District. The Fire District works with the local water providers to ensure services during emergencies. The School District works with the Fire District to coordinate emergency plans.

- Loomis Unified School District
- Placer County Water Agency

24.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District.

- Greater Auburn Area Fire Safe Council
- United Auburn Indian Community

24.5 Jurisdictional Capability Assessment

Penryn FPD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities

- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Penryn FPD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Penryn FPD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

24.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 24-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 24-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Fire Code **Title 24, Part 9** **January 1, 2026**	The California Fire Code is a comprehensive set of state regulations based on the International Fire Code (IFC) that establishes standards for life and property safety from fire and explosion hazards. It covers areas such as the storage and handling of hazardous materials, building construction, fire suppression systems, and conditions hazardous to life and property.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

24.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 24-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 24-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Capital Improvement Plan or Program	Aligned with hazard mitigation to ensure that infrastructure projects reduce community vulnerabilities and enhance resilience against identified hazards	Collaborate with Placer County on zoning, WUI, seismic, Flood zone, and other related development standards when expanding existing facilities and or building new facilities such as fire stations and training centers.	Board of Directors/ Administration
Community Wildfire Protection Plan	This project addresses wildfire hazard within Placer County. It contains mitigation actions and a mitigation strategy to reduce wildfire risk. The CWPP is integrated with the 2021 MJHMP.	The fire district collaborates with Placer OES on the CWPP	Placer County Office of Emergency Services
Other Community Plan	The fire district participates and supports FIREWISE communities throughout the district	The fire district plans to expand participation in FIREWISE communities and strengthen wildfire prevention efforts.	Placer County Office of Emergency Services

Name of Plan	Integration	Expand and Improve	Department Responsible
Emergency Operations Plan	The fire district is integrated in the EOP through the Fire Representative in the EOP.	he fire district will enhance its role in the EOP by increasing coordination and training opportunities.	Placer County Office of Emergency Services

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

24.5.3 Development and Permitting Capability

Penryn FPD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

24.5.4 Administrative Capability

Table 24-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 24-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Penryn FPD Board of Directors	The Board can endorse hazard mitigation projects.
Emergency Management/Public Safety Department	Fire and medical response
Mutual aid agreements	As per Western Placer County Fire Chiefs Association
Human Resources Manual ***e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?***	Emergency fire and medical response as part of the job descriptions

24.5.5 Technical Capability

Table 24-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 24-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Emergency Manager	Fire Chief acts as the emergency manager

Resources	Description, Expansion, Improvement
Other (this could include stormwater engineer, environmental specialist, etc.)	Fire Code inspectors and enforcement

24.5.6 Fiscal Capabilities

Table 24-6 summarizes financial resources available to Penryn FPD.

Table 24-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Authority to levy taxes for specific purposes	Special tax assessments levied on properties throughout the fire district as additional source of funding
Impact fees for homebuyers or developers of new development/homes	Mitigation impact fees collected to offset capital assets on new development for emergency response
Incur debt through special tax bonds	The fire district has the ability to secure funding for capital projects through special tax bonds

24.5.7 Education and Outreach Capability

Table 24-7 summarizes the education and outreach resources available to Penryn FPD.

Table 24-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Typically through the Fire Prevention/Administration For large scale incidents, the Placer County PIO is used and collaborates with the Fire District PIO
Hazard mitigation information available on your website	General fire prevention materials, programs, requirements, and information is provided to the public
Natural disaster/safety programs in place for schools	Fire Prevention programs delivered in schools includes wildfire issues
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Through NGO's, presentations are requested at various events that focus on hazards, risks, and prevention

24.5.8 Community Classifications

Table 24-8 summarizes classifications for community programs available to Penryn FPD.

Table 24-8. Community Classifications

Program	Participating?	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3/3Y	2022
Firewise Communities classification	Yes	Various in District	Ongoing
CAL FIRE Risk Reduction Community List	Yes	(Placer County)	2024

24.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 24-9 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 24-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Moderate-Resources have some capabilities for flood events along with training
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Strong

24.6 National Flood Insurance Program

Penryn Fire Protection is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

24.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Penryn FPD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

24.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 24-4 through Figure 24-7. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Penryn FPD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 24-4. Flood Hazard Area

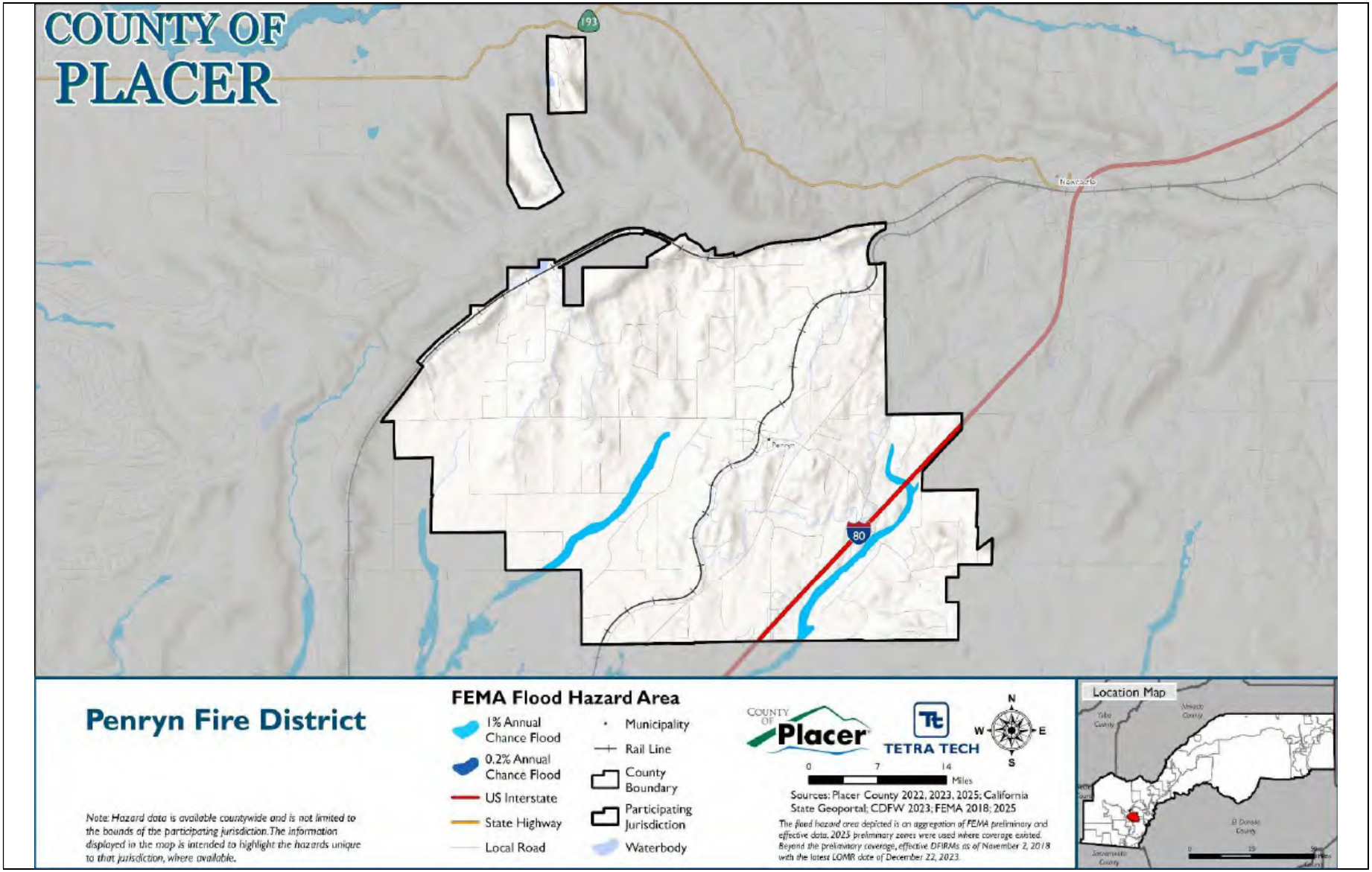


Figure 24-5. Landslide Hazard Area

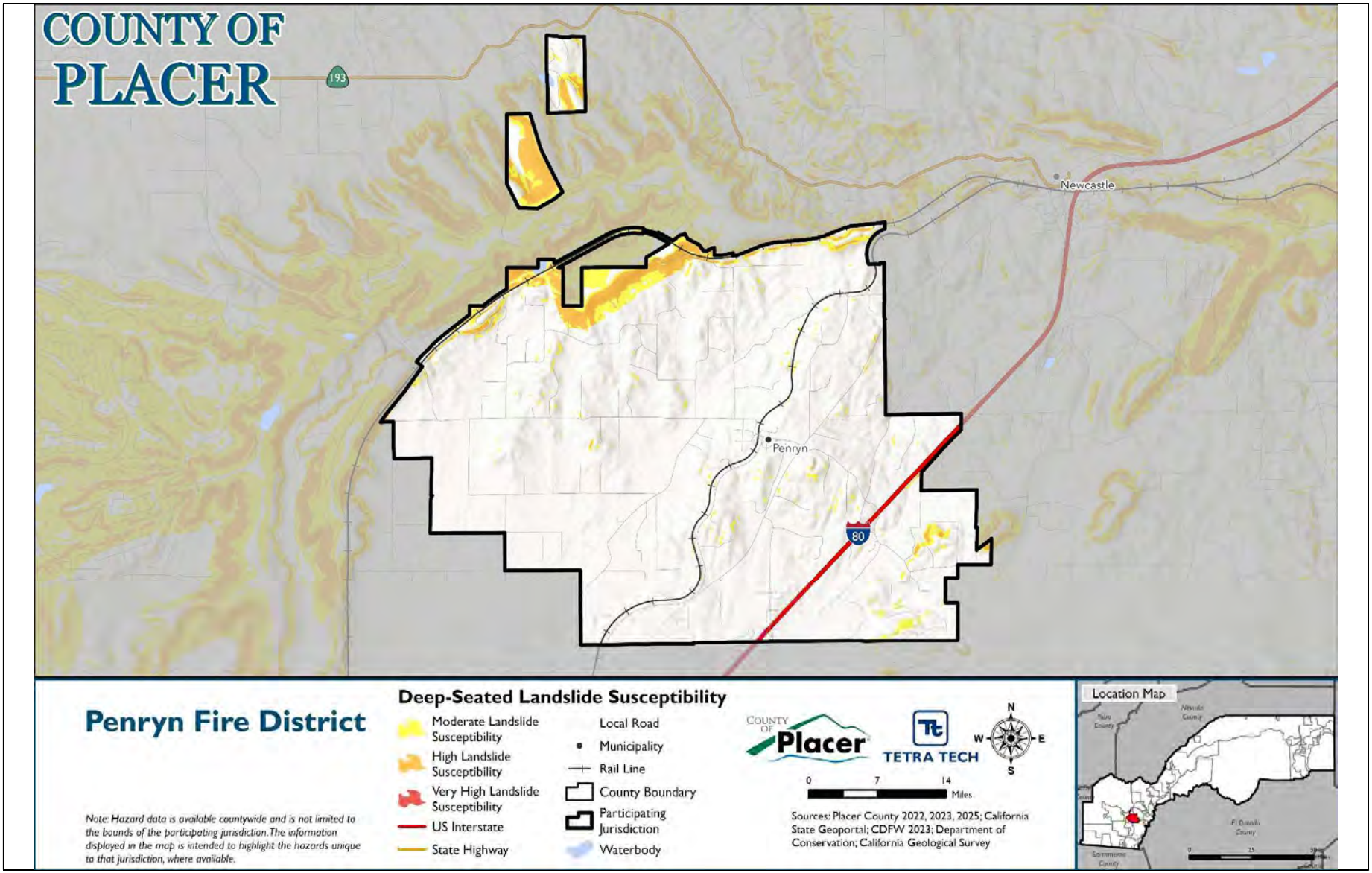


Figure 24-6. NEHRP Soil Class D Hazard Area

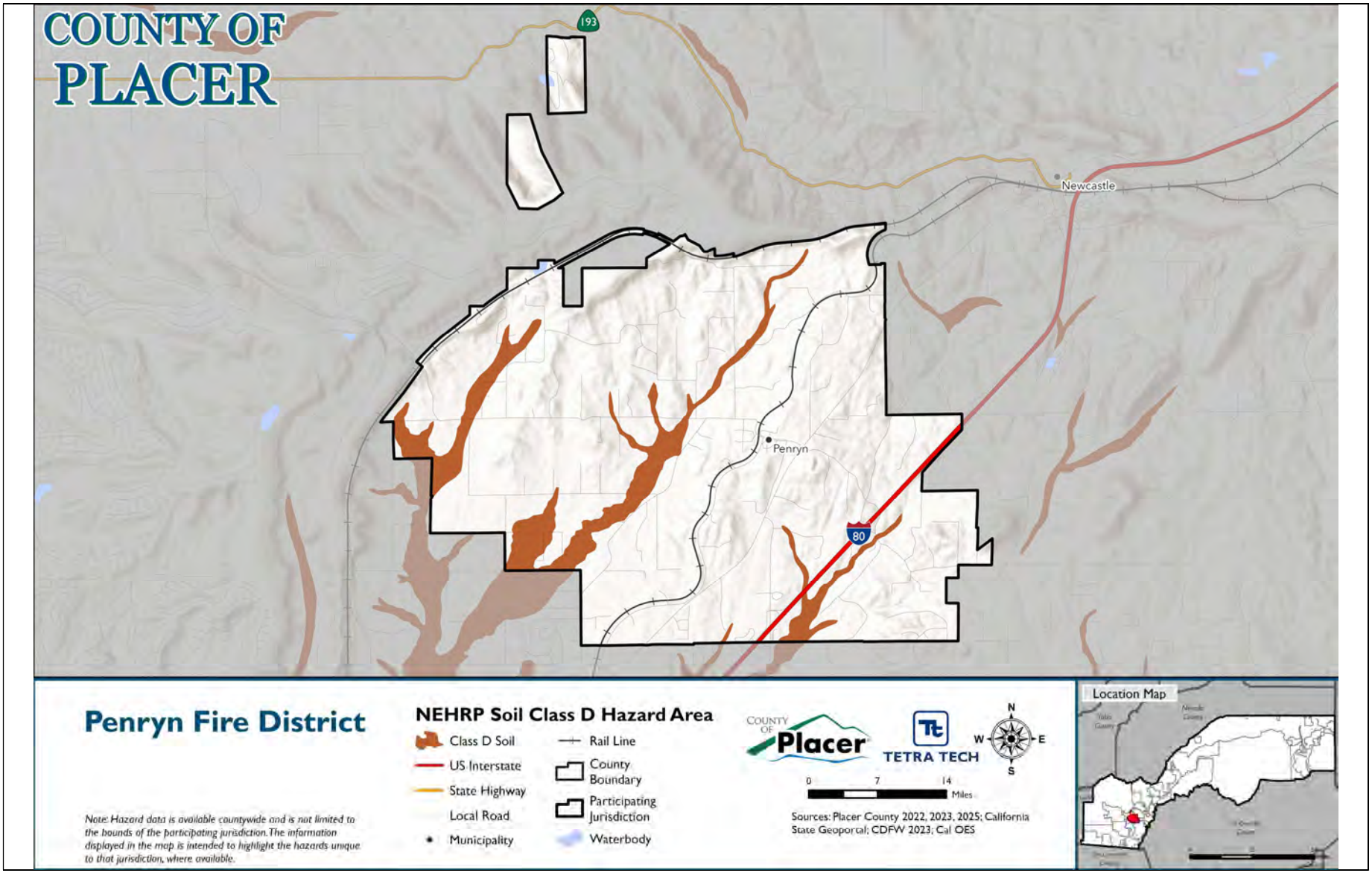
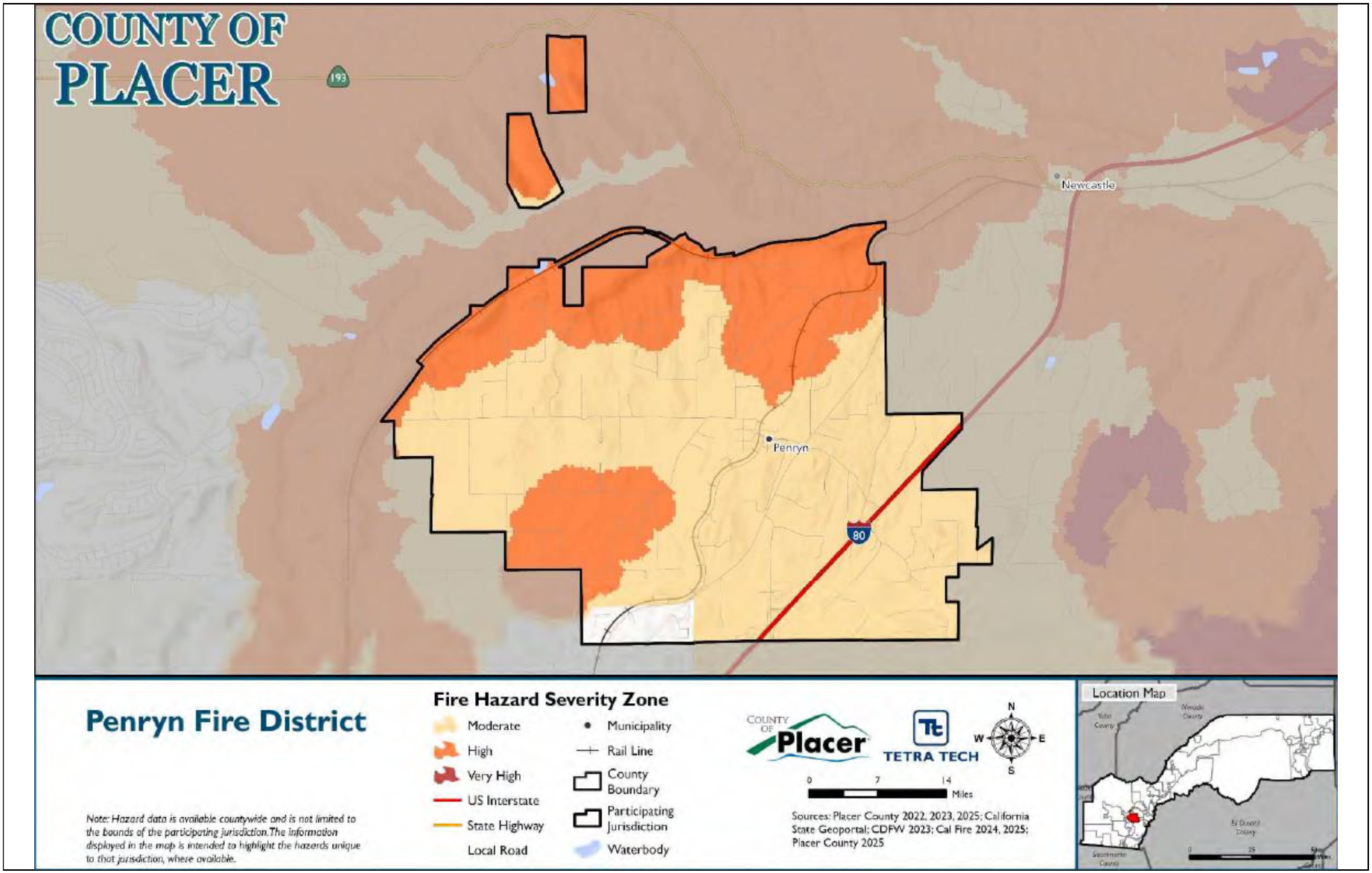


Figure 24-7. Wildfire Hazard Area



24.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 24-10 provides details on loss and damage in Penryn FPD during hazard events since the last hazard mitigation plan update.

Table 24-10. Hazard Event History in Penryn FPD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Localized street flooding and power outages Increased call volume
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	OES- Preposition (Mud / Debris) CA-OES-230013-XPL extra staffing O-202330582-RYN Penryn Fire District up staffed an extra engine and staffed it with 3 people for the event. The engine and staffing were available to be used in OES Region IV. Overtime Localized flooding of streets and power outages

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	OES- Preposition (mud / Debris) CA-OES-230013-XPL extra staffing O-20230127-RYN Penryn Fire District up staffed an extra engine and staffed it with 3 people for the event. The engine and staffing were available to be used in OES Region IV. Overtime Localized flooding of streets and power outages
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	Localized street flooding and power outages Increased call volume
March 4, 2023	March 7, 2023	Winter Weather	A powerful, cold storm system with heavy snow and gusty winds sometimes brought dangerous driving with whiteout conditions. Snow amounts of 3 to 5 feet were reported in the mountains. Heavy snow fell down into the foothills impacting travel. Numerous schools were closed or had delays due to the snow. Gusty winds of 40-50 mph were recorded across the area, with gusts locally higher in the high elevations of the northern Sierra. The winds and low snow combined to cause dangerous travel conditions with an extended closure of Interstate 80. Accumulating snow fell into the Motherlode foothills. CoCoRaHS snowfall reports included 3.0 inches at Grass Valley 2.7 SW, and 2.5 inches at Sonora 3.4E, 3.5 inches at Volcano 3.2N and 5.8 inches of snow at Camino 1.2 N. Schools and businesses were reported closed. Numerous power outages were reported, including continued outages from previous storms. Several storage units collapsed in Grass Valley due to heavy snow load. No injuries reported.	Localized street flooding and power outages Increased call volume

24.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Penryn FPD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- The wildfire hazard ranking increased from medium to high because the entire District is located within a State Responsibility Area (SRA) and falls in either a High or Moderate Fire Hazard Severity Zone (HFHSZ or MFHSZ).

Table 24-11 shows Penryn FPD 's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 24-11. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	High- All of the District is in SRA, in either HFHSZ or MFHSZ

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

24.7.4 Vulnerability Assessment

Table 24-12 lists issues related to the top hazards of concern for Penryn FPD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 24-12. Hazard Issues

Issue	Related Hazard
Reduce potential destruction from wildfire. Educate homeowners on steps they can take to protect their property, create a resilient landscape to protect from wildfire.	Wildfire
Inadequate access for emergency responders. Through inspection and education, residents can mitigate access issues to ensure access for evacuation and response for emergency resources.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Keep informed of potential weather and related events at all time. Be prepared to collaborate with other agencies and activate response plans, have everyone know their roles in a potential emergency.	Wildfire, Heavy Rains and Storms, Flood, High Wind and Tornadoes, Freeze and Snow
Identify areas within the fire district where mitigation measures may be implemented to reduce the destruction of wildlife.	Wildfire
Collaboration with other agencies and organizations to develop response plans, public information, sources of information, and information sharing. Create an environment where all organizations are working together.	Wildfire
Adopt specific amendments to the CA Fire Code that can assist in mitigating natural disasters within the fire district to reduce damage.	Wildfire
Difficulty in locating structures when no address signage is in place. Using a standard addressing system may assist all emergency responders and aid in response and evacuation.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire

24.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, **Error! Reference source not found.** describes the potential impacts of the hazards of local concern to Penryn FPD (hazards identified as medium or high risk in Table 24-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

24.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect Penryn FPD's overall vulnerability since the previous plan was approved.

Table 24-13. Hazard Impacts

Hazard	Potential Impacts
Wildfire	The District is located entirely within a State Responsibility Area and designated High or Moderate Fire Hazard Severity Zones, creating a significant risk of wildfire that could damage facilities, equipment, and threaten personnel despite existing mitigation practices. The fire station 38 could suffer damage as well as the apparatus housed in the station due to wildfire.

24.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

24.8.1 Changes in Community Priorities

The District's priority is to enhance wildfire prevention, improve emergency response capabilities, and strengthen community safety through proactive measures and collaboration with local partners.

24.8.2 Past Mitigation Action Status

Penryn FPD did not participate in the 2021 LHMP, there are no previously identified mitigation actions to report on in this update. Accordingly, this plan focuses solely on newly developed actions based on current assessments of hazards, vulnerabilities, and community needs.

24.8.3 Additional Mitigation Efforts

Although Penryn FPD did not participate in the previous plan, the District has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- 2025 the first community in Penryn was recognized as a FIREWISE Community with collaboration from the Greater Auburn Area Fire Safe Council and the Fire District.
- Through the FF's Association, the District offers assistance to citizens to purchase and post address signs within the District.

24.8.4 Hazards Omitted from Mitigation Strategy

Avalanche hazard was excluded because the District is not located in a snow-prone area. Dam and levee failure was omitted due to the absence of large bodies of water within the District. Freeze and snow hazards were also excluded, as the region does not experience conditions conducive to snowfall. All items in Low category may be a response by the fire district to support other agencies under the direction of Placer County, mitigation actions for such type of events are identified by Placer County.

24.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Penryn FPD would like to pursue in the future to reduce the risk from hazards.

Table 24-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 24-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	X	-	-	X
Drought and Water Shortage	X	-	-	X
Earthquake	X	-	-	X
Flood	X	-	-	X
Freeze and Snow	X	-	-	X
Heavy Rains and Storms	X	-	-	X
High Winds and Tornadoes	X	-	-	X
Landslides, Mudslides, and Debris Flows	X	-	-	X
Wildfire	X	-	-	X

LPR = Local Plans and Regulations
SIP = Structure and Infrastructure Project
NSP = Natural Systems Protection
EAP = Education and Awareness Programs

Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 24-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 24-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
PFPD-01	Defensible Space Inspections	4	1-5 Years	High	Low	9	High
PFPD-02	Access for Emergency Response	3	1-5 years	High	Low	8.75	High
PFPD-03	Monitor Weather Events	1	1-5 Years	High	Low	8.25	High
PFPD-04	Community Wildfire Protection Plan	1	1-5 Years	High	Low	8.25	High
PFPD-05	Fire Safe Council Collaboration	5	1-5 Years	Low	Low	7.25	Medium
PFPD-06	CA Fire Code Adoption	1	1-5 Years	Medium	Low	7.25	Medium
PFPD-07	Address Signage	3	1-5 years	Low	Low	6.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

24.8.6 Mitigation Strategy

Table 24-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 24-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PFPD-01	Defensible Space Inspections	Through an inspection process, educate, inform, and make recommendation for property owners on what actions to take to reduce the risk of destruction from wildfire. Identify vegetation to remove, reduce, and maintain to achieve defensible space. Identify potential areas of home hardening to better prepare for wildfire. Conduct inspections on private properties to identify specific needs of that property to achieve defensible space.	Wildfire	Penryn FPD Fire Prevention	Penryn FPD Administration	Staff time through general fund
PFPD-02	Access for Emergency Response	Through inspection, identify those areas needing fuel reduction along private roadways and driveways. Optimal clearance is 10 feet from each shoulder and 15 vertical clearance. Inform property owners of the importance and their responsibility to create and maintain these accesses for emergency response and civilian evacuation. Implement the formal process of “Notice to Abate” as needed.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Penryn FPD Fire Prevention	Penryn FPD Administration	Staff time through general fund
PFPD-03	Monitor Weather Events	Obtain the most up-to-date information regarding adverse weather, predicted weather events, and related weather that may impact District response to emergencies.	Wildfire, Heavy Rains and Storms, Flood, High Wind and Tornadoes, Freeze and Snow	Penryn FPD Operations	Penryn FPD Administration	Staff time through general fund
PFPD-04	Community Wildfire Protection Plan	Actively participate in the development and update of the Community Wildfire Protection Plan (CWPP) and implement the action items identified in the plan.	Wildfire	Penryn FPD Fire Prevention	Penryn FPD Administration	Staff time through general fund

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PFPD-05	Fire Safe Council Collaboration	The Penryn FPD participates in the Greater Auburn Area Fire Safe Council (GAAFSC). Continued participation and collaboration will occur on an on-going basis. Attending monthly meetings and participating in GAAFSC events.	Wildfire	Penryn FPD Fire Prevention	Penryn FPD Administration	Staff time through general fund
PFPD-06	CA Fire Code Adoption	Continue on the three year cycle of adopting the CA Fire Code with amendments to address natural hazards specific to the fire district.	Wildfire	Penryn FPD Fire Prevention	Penryn FPD Administration	Staff time through general fund
PFPD-07	Address Signage	Apply Placer County standard for addressing for all buildings throughout the fire district. Identify structures needing appropriate addressing and inform and educate property owners of a standard and consistent addressing means.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Penryn FPD Fire Prevention	Penryn FPD Administration	Staff time through general fund

25. Placer County Air Pollution Control District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Placer County Air Pollution Control District (Placer Air or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Placer Air, describes who participated in the planning process, assesses Placer Air's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Placer Air as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

25.1 Hazard Mitigation Planning Team

Placer Air identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Adam Baughman, Deputy Air Pollution Control Officer

Address: 110 Maple St. Auburn, CA 95603

Phone Number: 530-745-2322

Email: abaughman@placer.ca.gov

Alternate Point of Contact: Erik White, Air Pollution Control Officer

Address: 110 Maple St. Auburn, CA 95603

Phone Number: 530-745-2321

Email: ewhite@placer.ca.gov

The Deputy Air Pollution Control Officer represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 25-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 25-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Adam Baughman	Placer Air	Deputy Air Pollution Control Officer	SME, data input, mitigation measures worksheet
Erik White	Placer Air	Air Pollution Control Officer	Reviewer
Yushuo Chang	Placer Air	Senior Planner	SME, data input, mitigation measures worksheet
Bruce Springsteen	Placer Air	Senior APC Engineer	SME, data input
Molly Johnson	Placer Air	Air Pollution Control Specialist II	Mitigation Measures Worksheet
Ann Hobbs	Placer Air	Associate Planner	Mitigation Measures Worksheet

25.2 Community Profile

Placer Air plays a vital role in protecting public health by monitoring and managing air quality throughout the county. The District operates a network of permanent monitoring stations that collect data on ozone and fine particulate matter (PM2.5) 24 hours a day, seven days a week. As needed additional temporary monitors or PurpleAir sensors can be deployed to enhance monitoring coverage and provide real-time information. Governed by a Board of Directors appointed from local elected officials, the District administers incentive and grant programs aimed at reducing air pollution and supporting cleaner air initiatives, issues permits to businesses to ensure compliance with air quality rules and respond to citizen complaints.

25.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Placer Air completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

25.3.1 Outreach Activities

Placer Air conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

25.3.2 Public Feedback Integration

Public input was collected through posting on the District's website, posting of the overall LHMP surveys, and conversations with members of the public. No new proposed mitigation strategies were identified. For the District, community members expressed the greatest concern about hazards such as wildfire smoke.

25.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

25.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- CAL FIRE
- Placer County Fire Department

25.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- Placer County Community Development Resource Agency

25.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around Placer County. While many cities and neighboring counties are developing their own Local Hazard Mitigation Plans (LHMPs), the District's efforts contribute to regional resilience by addressing overlapping concerns such as resource protection and shared assets. This collaborative approach helps ensure consistency and strengthens mitigation strategies across jurisdictions.

- City of Auburn
- City of Colfax
- City of Lincoln
- City of Rocklin
- City of Roseville

- El Dorado County
- Nevada County
- Town of Loomis
- Town of Truckee

25.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around Placer Air.

- Pacific Gas & Electric
- Placer County Office of Education
- Sierra Business Council
- Sierra College
- VISIT Placer

25.4.5 Nonprofit Organizations and Community-Based Organizations

These nonprofit and community-based organizations bring valuable local knowledge, resources, and community connections to the MJHMP process. Their engagement ensures that the perspectives of underserved populations, culturally significant lands, and hazard-prone communities are meaningfully incorporated into the planning effort.

- American Red Cross
- Latino Leadership Council
- The Nature Conservancy
- The Salvation Army
- United Auburn Indian Community
- Washoe Tribe

25.5 Jurisdictional Capability Assessment

Placer Air performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities

- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer Air to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Placer Air lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the respective municipality (City or County) where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

25.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 25-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 25-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from health, sanitation, environmental protection, air pollution, and hazardous waste to controlled substances along with workplace safety through Cal/OSHA.	The District has the authority to enforce applicable state codes but not to expand or improve.	Placer County Air Pollution Control District, Placer County Environmental Health

25.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 25-3 summarizes the plans currently in place. These documents incorporate wildfire-related policies and mitigation priorities, although they are not explicitly integrated with the MJHMP. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects, can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table below will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

25.5.3 Development and Permitting Capability

Placer Air is a special district located in Placer County with purview over air pollutant emissions from stationary sources. Placer County and State of California enforce building codes and land use regulations with the District's jurisdiction. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County or the appropriate municipality or agency.

Table 25-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Placer County General Plan	The District is committed to integrating additional resources, funding, and collaborative planning efforts to strengthen operations and implement mitigation measures that reduce public health risks from extreme heat and wildfire smoke. The District develops strategies and rules designed to decrease air pollutant emissions and improve air quality thereby moving the region toward attainment of state and federal ambient air quality standards. The proposed mitigation measures are consistent with the District's air quality improvement planning.	Additional resources and funding for District operations and the proposed mitigation measures will help address impacts to public health due to Extreme Heat and Wildfire (Smoke) impacts. Increased public education and outreach will better inform the public of potential health impacts due to these three hazards. Well placed low-cost air sensors (ex. Purple Air) allows the public to make informed decisions about daily activities during wildfire smoke events. Air purifying equipment at local Clean Air Centers during wildfire smoke events can provide a healthier environment especially for the low-income community.	Air Pollution Control Officer
Sacramento Wildfire Exceptional Event Mitigation Plan 2018	The District will integrate additional resources, funding, and collaborative planning efforts to strengthen operations and implement mitigation strategies that reduce public health risks from extreme heat and wildfire smoke. The District worked with other Sacramento local air districts to develop the Sacramento Wildfire Exceptional Event Mitigation Plan in 2018. The plan is developed to minimize the public exposure to PM2.5 generated from wildfire events.	Additional resources and funding for District operations and the proposed mitigation measures will help address impacts to public health due to Extreme Heat and Wildfire (Smoke) impacts. Increased public education and outreach will better inform the public of potential health impacts due to these three hazards. Well placed local, low-cost, air sensors (ex. Purple Air) allows the public to make informed decisions about daily activities during wildfire smoke events. Air purifying equipment at local Clean Air Centers during wildfire smoke events can provide a healthier environment, especially for the low income community.	Air Pollution Control Officer

25.5.4 Administrative Capability

Table 25-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 25-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Placer Air Board of Directors	The Board could endorse hazard mitigation projects.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	The District periodically must clear the area around monitors and weather stations of vegetation. This is sometimes done in coordination with CAL FIRE and/or USFS, or the land owner whose property the equipment is located.

25.5.5 Technical Capability

Table 25-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 25-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Air quality specialists, planners or engineers with knowledge of air pollution mitigation.	The District has a variety of staff who are subject-matter experts skilled in air pollution control mitigation.

25.5.6 Fiscal Capabilities

Table 25-6 summarizes financial resources available to Placer Air.

Table 25-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Authority to levy taxes for specific purposes	Vehicles in Placer County are assessed a fee as part of annual vehicle registration that goes to support a portion of District operations.
Impact fees for homebuyers or developers of new development/homes	Land Use mitigation funds
Other federal or state Funding Programs	The District receives various funding from state and federal sources, primarily as pass through grants.

25.5.7 Education and Outreach Capability

Table 25-7 summarizes the education and outreach resources available to Placer Air.

Table 25-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Organizations that conduct outreach to socially vulnerable populations and underserved communities	The District contracts with the local Health Education Council's Invest Health, Roseville to outreach to underserved populations in low-income communities.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	The District has produced various smoke outreach materials, such as the outdoor smoke activity table for school day decision making developed with the County's Office of Education along with a separate one developed for the general public. The District developed a "smoke" business card which has a variety of ways on it to find out about smoke and ways to protect yourself. This business card has been blown up into a small poster, that during a smoke incident, has been posted in public locations for use.

25.5.8 Community Classifications

Placer Air does not have formal classifications for community programs.

25.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 25-8 summarizes the

adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 25-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Weak

25.6 National Flood Insurance Program

Placer County Air Pollution Control is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

25.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer Air's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

25.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 25-1 through Figure 25-6. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Placer Air has significant exposure. The maps show the location of potential new development, where available.

Figure 25-1. Avalanche Hazard Area

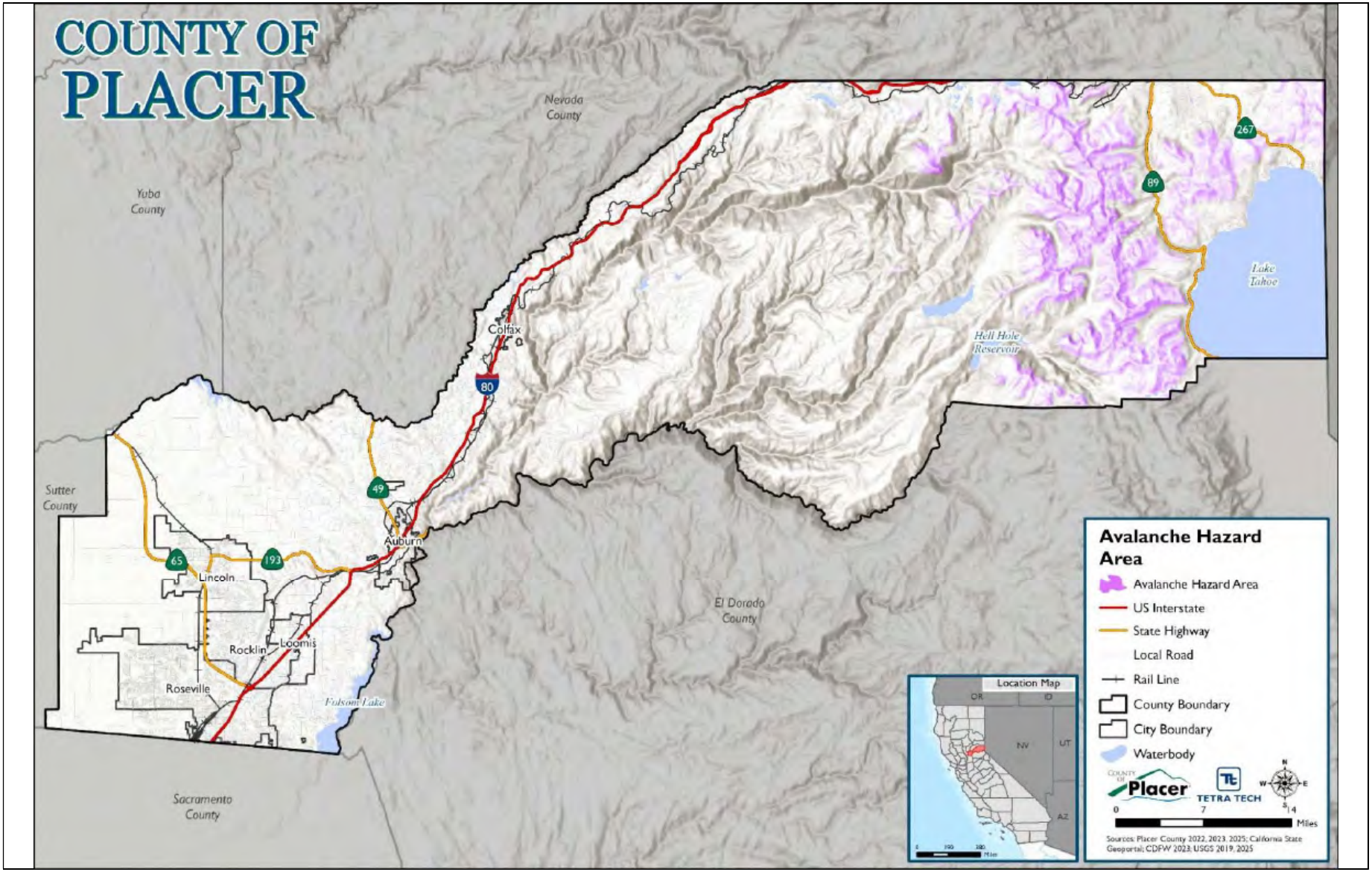


Figure 25-2. Dam Failure Inundation Hazard Area

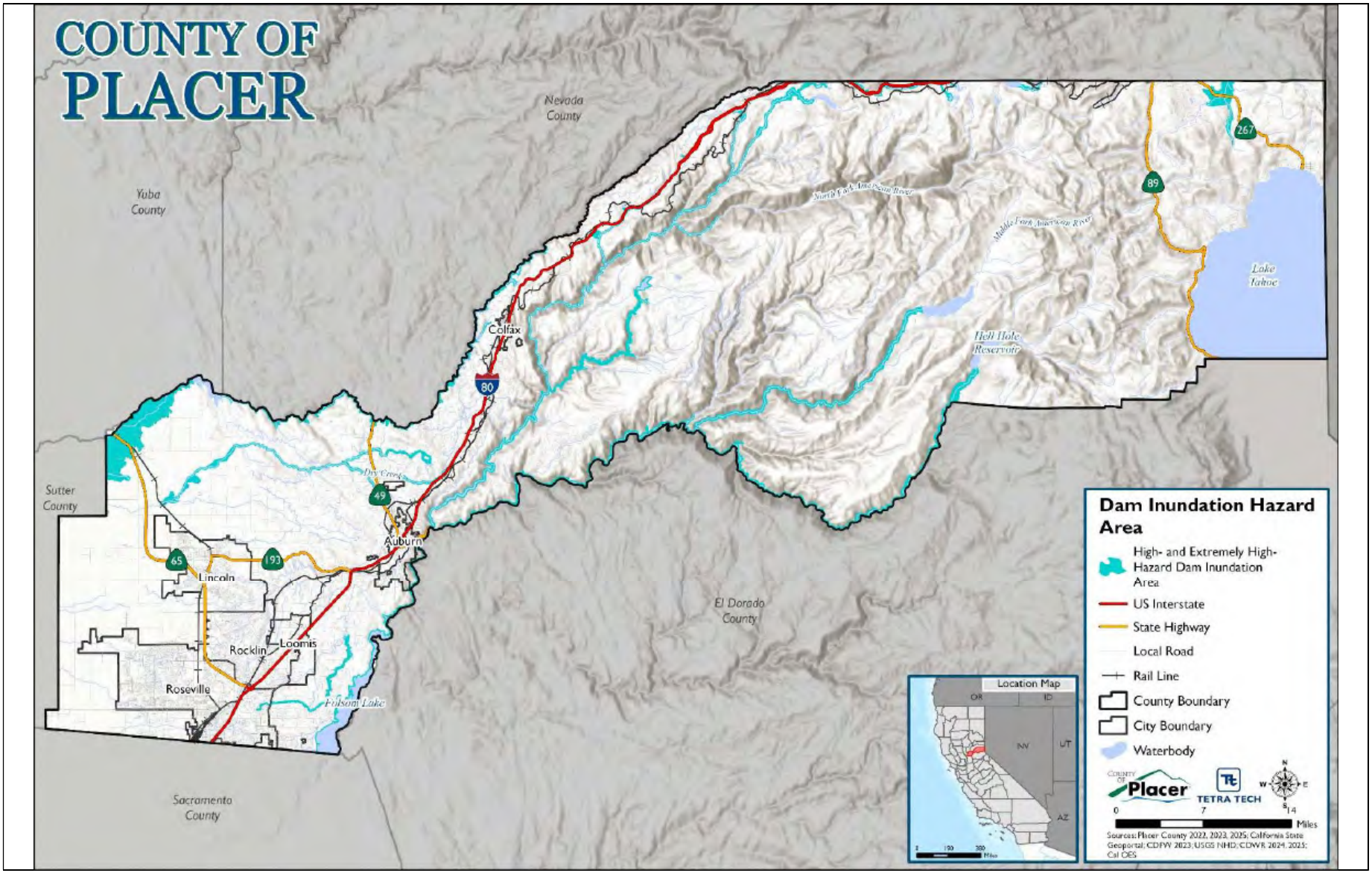


Figure 25-3. Flood Hazard Area

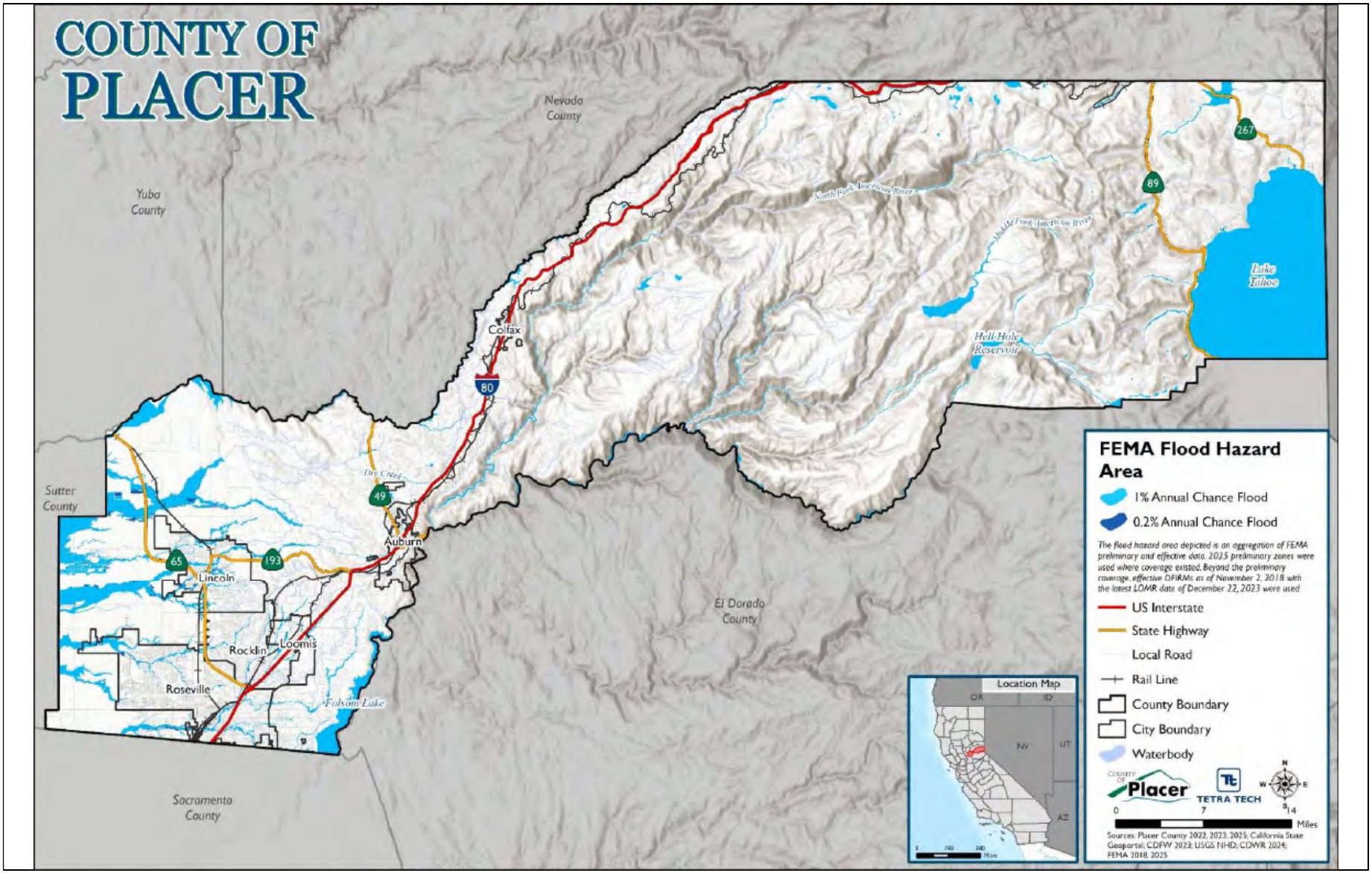


Figure 25-4. Landslide Hazard Area

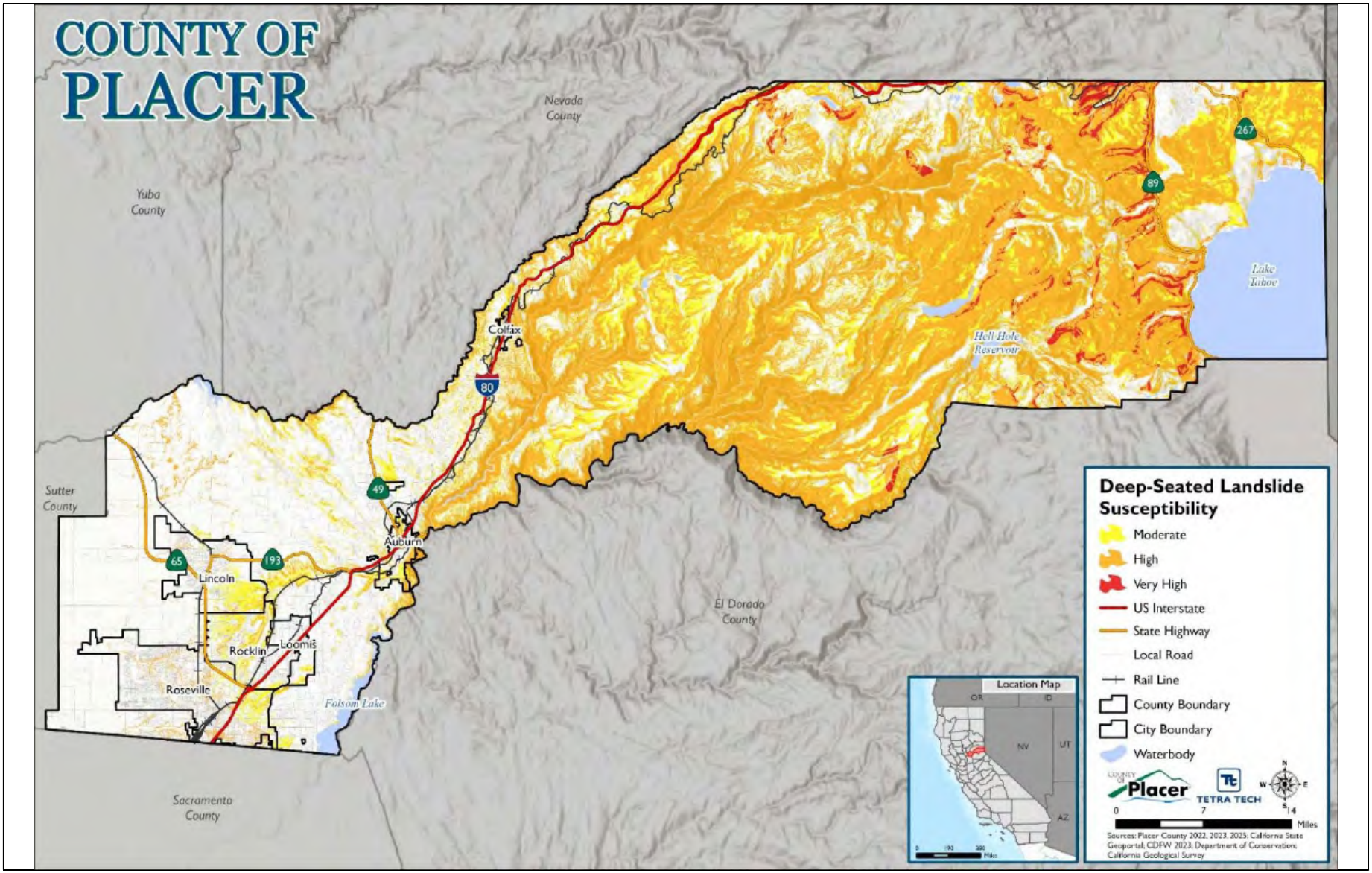


Figure 25-5. NEHRP Soil Class D Hazard Area

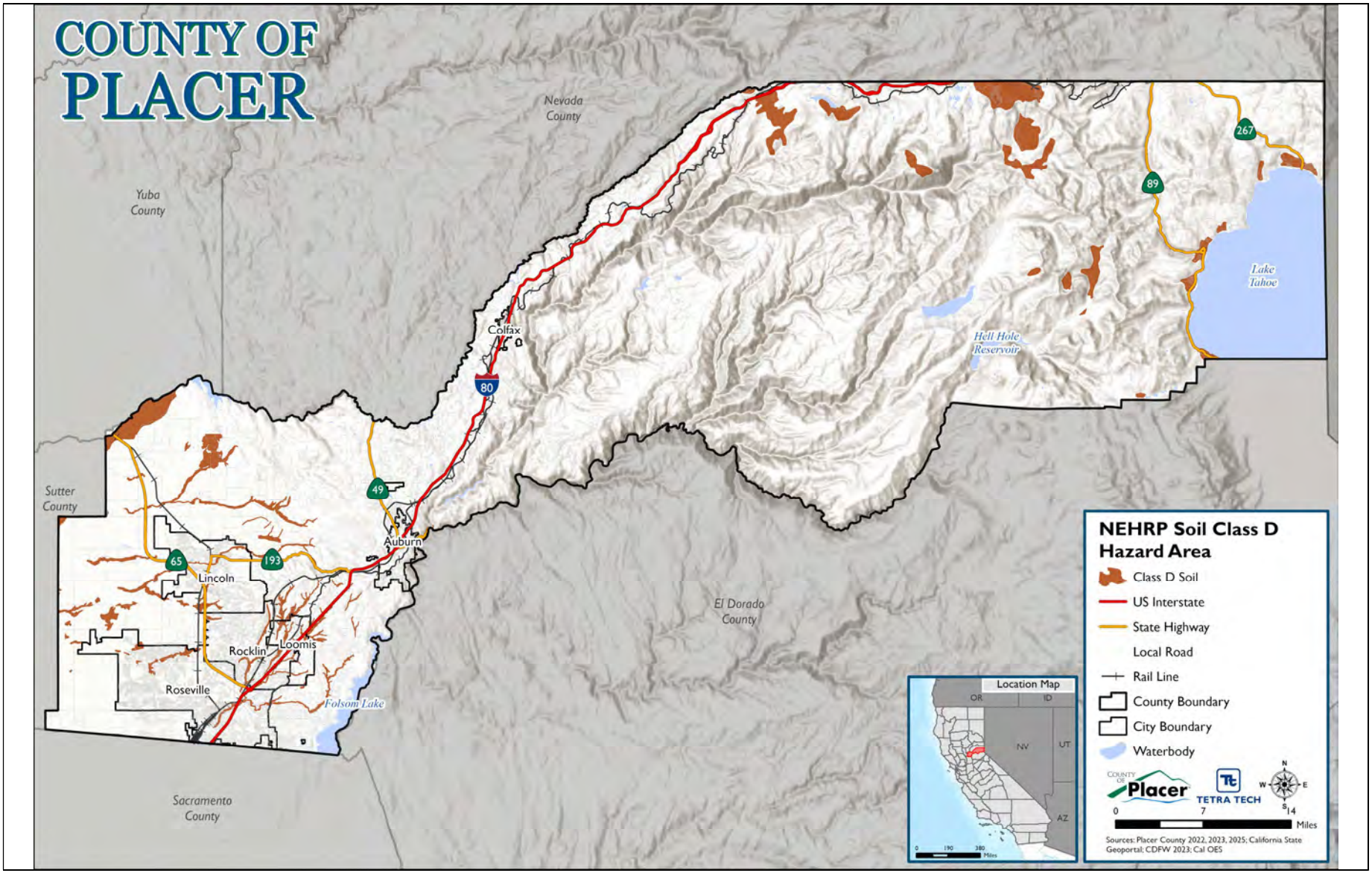
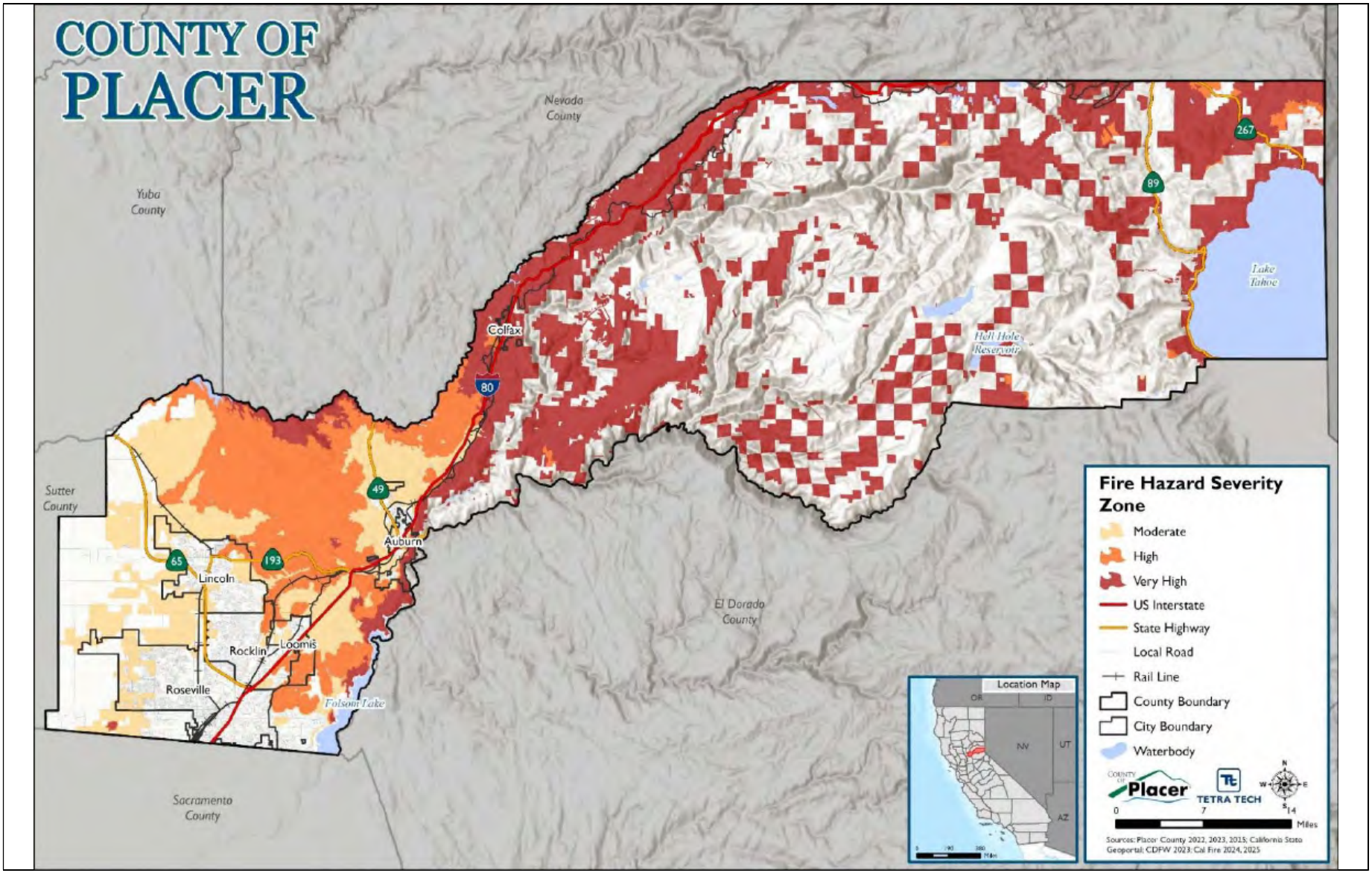


Figure 25-6. Wildfire Hazard Area



25.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of events that have impacted the overall planning area. For Placer Air, there are no known past hazard events that have caused losses or damage since the last hazard mitigation plan update.

25.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Placer Air reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 25-9 shows Placer Air ‘s final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 25-9. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

25.7.4 Vulnerability Assessment

Table 25-10 lists issues related to the top hazards of concern for Placer Air. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 25-10. Hazard Issues

Issue	Related Hazard
During wildfire smoke events, the public may need information to help keep themselves and their loved ones safe from breathing smoke. The District's public outreach materials provide relevant information to the public on what they can do to minimize wildfire smoke impacts to their health.	Wildfire Smoke
Wildfire smoke events can create hazardous air quality in various locations. Dependent upon where wildfire smoke travels, the use of local air quality sensors can provide the public with situational awareness. These local air quality sensors provide quick visual information on local particulate matter (PM) concentrations from wildfire smoke. Though dependent upon the location, there may not be sufficient sensors to use to make health-based decisions. Many groups, such as schools and outdoor sports leagues, use air quality data /information to determine the level and intensity of smoke prior to commencing outdoor activities.	Wildfire Smoke
During a wildfire smoke event, members of the public, especially vulnerable populations and the unhoused, may have no place to go to escape breathing smoke. Clean Air Centers can provide a temporary respite during times of poor air quality from wildfire smoke. Though there may not be enough clean air centers available.	Wildfire Smoke

25.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 25-11 describes the potential impacts of the hazards of local concern to Placer Air (hazards identified as medium or high risk in Table 25-9). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 25-11. Hazard Impacts

Hazard	Potential Impacts
Wildfire & Smoke	Wildfire smoke events can create widespread hazardous air quality, impacting public health and safety. Limited access to real-time, location-specific air quality data makes it difficult for residents to make informed decisions about outdoor activities. Vulnerable populations, including the unhoused, often lack safe indoor spaces during these events, increasing health risks. Smoky conditions highlight the need for public education, localized air monitoring, and clean air centers to reduce exposure to harmful particulate matter.

25.7.6 Changing Conditions That May Impact Risk

Population and development changes for Placer Air are consistent with those identified in Chapter 2 County of Placer. Since the previous plan was approved, booming population and development have increased the vulnerability of the District.

25.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

25.8.1 Changes in Community Priorities

The District is prioritizing initiatives that protect public health during wildfire smoke events and other air quality challenges. Efforts focus on improving community awareness, providing timely and localized air quality information, and ensuring access to safe indoor environments for vulnerable populations. These priorities reflect a commitment to reducing health risks, enhancing resilience, and supporting informed decision-making during hazardous air conditions.

25.8.2 Past Mitigation Action Status

Table 25-12 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 25-12. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	Develop and distribute wildfire smoke, related materials to the public. Support wildfire smoke impact response, and extreme heat events, such as press releases, public education events, webpage-based information, social media posts and brochures/flyers/pamphlets/fact sheets.	Air Quality Public Education & Outreach	Not Complete	Yes	-
2	This project would purchase and deploy throughout the county low-cost, local air quality sensors that quickly measure PM levels. Typically, this information is uploaded to a website or app where anyone can view current and recent past readings of PM concentration. Various thresholds of PM concentrations are indicated allowing the viewer to determine if it is safe for them to spend time outdoors. Many groups, such as schools and outdoor sports leagues, use this information to determine the level and intensity of smoke prior to commencing outdoor activities.	Local Air Quality Sensors to provide quick public information on local PM concentrations due to wildfire smoke.	Not Complete	Yes	-

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
3	Establish Clean Air Centers to help those most affected by wildfire smoke impacts. These Centers can provide enhanced air filtration at facilities in communities with vulnerable populations in Auburn, Kings Beach, Lincoln, Rocklin and Roseville, recognizing that unhealthy air disproportionately impacts children and elderly populations, people with pre-existing health problems, and low-income communities. The Clean Air Centers will be equipped with portable, high performance ultra-fine particulate matter (PM2.5) air filtration units. Portable units will provide Placer Air and regional emergency management authorities and disaster response agencies the flexibility to address smoke impacts in the county. Covered costs would include staffing at both portable sites and the permanent sites of Roseville High School and Placer High School.	Wildfire Smoke Impact Response – Clean Air Centers for Vulnerable Populations	Not Complete	Yes	-

25.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, Placer Air has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Purchased a temporary portable air monitor.
- Obtained additional Purple Air Sensors

25.8.4 Hazards Omitted from Mitigation Strategy

Placer Air is a very focused agency whose core vision is to achieve and maintain clean air standards throughout Placer County. The District does not have the capacity to design an all-hazards mitigation program, nor is it in their mission. The District chose three targeted projects that directly mitigate their major hazard of concern – wildfire smoke.

25.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Placer Air would like to pursue in the future to reduce the risk from hazards.

Table 25-13 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 25-13. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	-	-	-
Drought and Water Shortage	-	-	-	-
Earthquake	-	-	-	-
Flood	-	-	-	-
Freeze and Snow	-	-	-	-
Heavy Rains and Storms	-	-	-	-
High Winds and Tornadoes	-	-	-	-
Landslides, Mudslides, and Debris Flows	-	-	-	-
Wildfire	-	X	-	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 25-14 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 25-14. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
PCAPCD-01	Air Quality Public Education	7	1-5 Years	Medium	Low	7.75	Medium
PCAPCD-02	Air Quality Low Cost Sensors	3	1-5 Years	Medium	Low	7.75	Medium
PCAPCD-03	Clean Air Centers for Wildfire Smoke	3	1-5 Years	Medium	Low	7.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

25.8.6 Mitigation Strategy

Table 25-15 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The Placer Air Pollution Control Officer will lead implementation of all projects listed in Table 25-15. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 25-15. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
PCAPCD-01	Air Quality Public Education	Develop and distribute wildfire smoke, related materials to the public. Support wildfire smoke impact response, such as press releases, public education events, webpage-based information, social media posts and brochures, flyers, pamphlets, and fact sheets.	Wildfire Smoke	Placer Air, Placer County Public Information Office	District funds
PCAPCD-02	Air Quality Sensors	This project would purchase and deploy throughout the county low-cost, air quality sensors, where needed that quickly measures PM levels. Typically, this information is uploaded to a website or app where anyone can view current readings of PM concentrations. When used in conjunction with the PM concentration information various PM thresholds allow the viewer to make their own health decisions on spending time outdoors.	Wildfire Smoke	Placer Air	District funds
PCAPCD-03	Clean Air Centers for Wildfire Smoke	Establish Clean Air Centers to help those most affected by wildfire smoke. The Centers can provide enhanced air filtration at facilities in communities with vulnerable populations in Auburn, Kings Beach, Lincoln, Rocklin and Roseville, recognizing that unhealthy air disproportionately impacts children and elderly populations, people with pre-existing health problems, and low-income communities. The Clean Air Centers may be equipped with portable, high performance ultra-fine particulate matter (PM2.5) air filtration units. Portable units will provide the Placer Air and regional emergency management authorities and disaster response agencies the flexibility to address smoke impacts anywhere in the county. Covered costs would include staffing at both portable sites and the permanent ones at Roseville High School and Placer High School.	Wildfire Smoke	Placer Air, various school districts, local non-profits, and local fire agencies.	District funds and or local funding

26. Placer County Flood Control and Water Conservation District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist the Placer County Flood Control and Water Conservation District (PCFCWCD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of the District, describes who participated in the planning process, assesses the District's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to the District as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

26.1 Hazard Mitigation Planning Team

The District identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Brad Brewer, District Manager

Address: 3091 County Center Drive, Suite 220, Auburn, CA 95603

Phone Number: 530-745-7541

Email: BBrewer@placer.ca.gov

Alternate Point of Contact: Eric Griffin, Development Review Coordinator

Address: 3091 County Center Drive, Suite 220, Auburn, CA 95603

Phone Number: 530-745-7592

Email: Egriffin@placer.ca.gov

The District Manager represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 26-1 summarizes District officials who participated in the development of the annex and in what capacity. Additional documentation of the District's planning activities through Planning Partnership meetings is included in Volume 1.

Table 26-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Brad Brewer	Flood Control District	District Manager	Provide input on plan and review jurisdictional annex
Eric Griffin	Flood Control District	Development Review Coordinator	Drafting required plan documents.

26.2 Community Profile

The Placer County Flood Control and Water Conservation District, established in 1984 by the State Legislature as a Special District separate from County government, was created to address flood control challenges associated with growth. Its boundaries align with those of Placer County. The District's primary mission is to protect lives and property from the effects of flooding through comprehensive and coordinated flood prevention planning. To achieve this, the District applies consistent standards to evaluate flood risk, and implements flood control measures such as recommending the construction of detention and/or retention basins for new developments as needed and operation and management of a countywide flood warning system.

The District also plans and implements regional flood control projects along with developing and implementing master plans for selected watersheds within the County. It provides technical planning, support, and information during flood and drought events to cities, the County, and the development community. Additional responsibilities include operating and maintaining the flood alert warning system, reviewing proposed development projects for compliance with District standards, developing hydrologic and hydraulic models for County watersheds, and offering technical support to the Office of Emergency Service (OES).

26.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

26.3.1 Outreach Activities

The District attended virtual outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual

Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District posted MJHMP information on their public notice bulletin board, as shown in Figure 26-1.

26.3.2 Public Feedback Integration

No public feedback was received by the District related to hazard mitigation throughout the planning process.

Figure 26-1. Bulletin Board Flyer

26.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

26.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County. Local and regional agencies contribute to the Hazard Mitigation Plan by:

- Participating in stakeholder meetings and workshops to share expertise and identify risk areas
- Identifying and providing technical data and GIS resources to support hazard mapping and vulnerability assessments
- Drafting and review of plan documents to ensure accuracy and feasibility of potential mitigation actions
- Offering feedback on proposed projects and mitigation actions based on operational experience
- Coordinating emergency response and recovery planning efforts that align with mitigation priorities
- Supporting public outreach and education campaigns to raise community awareness of flood and wildfire hazards
- Provide grant funding opportunities and collaboration for hazard mitigation projects

The District coordinates closely with these agencies below to ensure an integrated, multi-disciplinary approach to reducing flood risk and enhancing community resilience.

- Placer County Department of Public Works/Stormwater and Floodplain Programs
- Placer County Office of Emergency Services
- California Department of Water Resources
- Federal Emergency Management Association (FEMA) Region IX

26.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. The District coordinates with planning and engineering **member agency staff** representing all jurisdictions within Placer County to provide recommendations for land development with respect to flood risk.

The District provides **technical review and input** on development proposals such as:

- Improvement plans
- Environmental impact documents
- Projects with potential to increase **peak runoff flows** to major streams
- Projects with potential **floodplain or drainage impacts**

While each of the **member agencies** take the lead in processing and approving development applications, the District provides technical support and recommendations to ensure consistency with flood hazard mitigation policies. Final project approvals, including **entitlements and improvement plans**, are issued by each member agency governing body with District flood risk mitigation recommendations integrated during plan review and project conditioning.

- Placer County Community Development Resource Agency- Planning Services Division
- Placer County Community Development Resource Agency- Engineering & Surveying Division
- City of Roseville
- City of Rocklin
- Town of Loomis
- City of Lincoln
- City of Auburn
- City of Colfax

26.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District. The District works closely with a wide range of local, regional, state, and federal agencies that contribute to hazard mitigation planning and implementation. These agencies support the MJHMP by participating in planning meetings, sharing technical data (e.g., GIS, hydrology, infrastructure), identifying vulnerabilities, reviewing draft mitigation actions, and providing support for cross-jurisdictional projects. This collaborative approach ensures that mitigation actions are feasible, well-informed, and consistent with broader local, regional, and federal priorities.

- City of Roseville
- City of Rocklin
- Town of Loomis
- City of Lincoln
- City of Auburn
- City of Colfax
- City and County of Sacramento
- Sutter County

26.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District. The District does not engage directly with businesses, academic institutions, or other private organizations in the development of flood hazard planning or mitigation actions. However, input from private organizations is welcomed through participation in the public meeting outreach and engagement process.

- Pacific Gas and Electric
- Sacramento Metropolitan Utility District
- Sierra Business Council

26.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District. While the District does not serve as the lead agency for direct engagement with nonprofit or community-based organizations, several key partners may contribute to hazard mitigation planning and mitigation efforts and support District-related goals. These include:

- California Conservation Corps (CCC) – A state-operated workforce development program with local crews that support flood mitigation through debris removal, erosion control, vegetation management, and emergency response. The CCC supports underserved communities and provides post-storm recovery and fuel reduction that aligns with flood risk mitigation objectives. The CCC also supports the District's yearly stream channel maintenance hazard mitigation program by performing vegetation maintenance work in flood prone stream areas.
- Dry Creek Conservancy, Valley Foothill Watersheds Collaborative, American River Basin Collaborative –Local nonprofit agencies focused on watershed health and public education within the Dry Creek and surrounding watersheds. They have partnered on stream restoration and outreach projects that support sustainable floodplain function and stormwater quality through volunteer workdays.
- Sierra Nevada Alliance – A regional nonprofit that mobilizes conservation efforts across the Sierra Nevada, including watershed resilience, climate adaptation, and community engagement. While not Placer-specific, the Alliance's network of conservation partners and AmeriCorps programs may support regional mitigation planning and implementation through volunteer workdays and outreach.

These organizations can contribute to the MJHMP by:

- Participating in workshops
- Assisting with public outreach and education related to flood awareness and watershed stewardship
- Supporting mitigation actions through volunteer labor, technical assistance, or educational campaigns.

26.5 Jurisdictional Capability Assessment

The District performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for the District to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, the Placer County Flood Control and Water Conservation District lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The District has established strong, collaborative relationships with Placer County and other local jurisdictions, enabling effective coordination and implementation of hazard mitigation efforts. While there are currently no critical gaps or limitations, opportunities for improvement always exist such as exploring updates to plans and studies. Expanding the ALERT flood warning system will enhance monitoring capabilities and improve response to flood events. Advancing flood inundation forecasting software will support more effective emergency planning and operational decision-making. Impact fees for new development is being further explored and planned for projects within the Cross Canal Watershed to support regional flood control initiatives and further reduce flood risk. Continued collaboration with FEMA's Cooperating Technical Partners (CTP) program and the California Department of Water Resources (DWR) Flood Emergency Response Program (FERP) will help

mitigate risk through updated floodplain mapping and the expansion and enhancement of flood warning systems within Placer County. Public outreach will also continue to support new CTP floodplain mapping in addition to future potential elevation projects.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

26.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 26-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 26-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
Stormwater Management Code or Program	The PCFCWCD Stormwater Management Manual (SWMM) supports hazard mitigation and the Local Hazard Mitigation Plan (LHMP) by incorporating flood risk reduction through establishment of drainage and development standards. It establishes hydrologic and facility design criteria to help mitigate downstream flooding. While it does not explicitly reference the County's LHMP, implementation of the SWMM directly advances LHMP objectives related to flood hazard mitigation and resilient infrastructure planning.	PCFCWCD has the authority to expand and improve the SWMM. However, codes adopting the SWMM are managed and updated by Placer County communities.	See Placer County community requirements
California Water Code **January 1, 2023**	The California Water Code establishes regulations applied to water resources and water service providers in California. Hazard mitigation is addressed in Division 3 (Dams and Reservoirs), Division 5 (Flood Control), Division 6 (Conservation, Development, and Utilization of State Water Resources), and Division 28 (Wildfire Prevention and Recovery Act of 2019).	The District does not have the authority to expand or improve state codes.	California Department of Water Resources

26.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 26-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 26-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Placer County Stormwater Management Manual (September 1990) and Amendments	The Placer SWMM supports hazard mitigation by establishing hydrology, hydraulics, and stormwater management standards that help reduce flood risk and protect water resources. The SWMM outlines policy, guidelines, and specific design criteria for the development and management of natural resources, drainage facilities, and infrastructure for stormwater management. While it does not explicitly reference the County's LHMP, it provides resilience standards for drainage and stormwater management that align with the LHMP's flood hazard reduction goals.	PCFCWCD has the authority to expand and improve the SWMM. This includes coordination with the County and other jurisdictions to ensure best practices and mitigation measures are included to reduce long term hazard impacts. The future planned update to the SWMM will incorporate Senate Bill 5 and Urban Level of Flood Protection (ULOP) requirements among other necessary updates.	District Manager
Dry Creek Watershed Flood Control Plan, November 2011	The Dry Creek Watershed Flood Control Plan in Placer County primarily addresses managing flood waters within the Dry Creek Watershed which includes Miners Ravine, Linda Creek, Secret Ravine, Antelope Creek, Cirby Creek, and Dry Creek. The Plan evaluates existing flooding problems and identifies flood management options as well as funding mechanism to achieve Plan recommendations to reduce risk. While flooding is the main focus, the plan acknowledges the broader context of natural hazards and the need for integrated management. It establishes clear resilience standards through mitigation recommendations, though it does not explicitly reference the LHMP. However, its objectives align closely with the LHMP's goal of reducing disaster losses and enhancing community resilience.	PCFCWCD prepared this multi-jurisdictional plan and is continually coordinating with the County and other jurisdictions to ensure best practices and mitigation measures are implemented to reduce long term hazard impacts. The plan was first drafted in 1992 and updated in 2011.	District Manager
Cross Canal Watershed Flood Control Plan Vol 1 & 2, June 1993	The Cross Canal Watershed Flood Control Plan primarily addresses managing flood waters within the Cross Canal watershed, including Auburn Ravine, Raccoon Creek, Curry Creek, Markham Ravine, Yankee Slough, and Pleasant Grove Creek. The Plan identifies existing flooding problems and identifies flood management options as well as a funding mechanism to achieve Plan recommendations to reduce flood risk. Flooding is the primary natural hazard addressed, and the plan establishes resilience standards through mitigation recommendations, though it does not explicitly reference the LHMP. However, its objectives align closely with the LHMP's goal of reducing disaster losses and enhancing community resilience.	PCFCWCD prepared this multi-jurisdictional plan and is continually coordinating with Placer County and other jurisdictions to ensure best practices and mitigation measures are explored and implemented to reduce long term hazard impacts.	District Manager

Name of Plan	Integration	Expand and Improve	Department Responsible
Auburn Bowman Community Plan Hydrology Study, July 1992	The Auburn/Bowman Community Plan Hydrology Study primarily addresses managing flood waters within the Auburn/Bowman planning area including Auburn Ravine, Mormon Ravine, Dutch Ravine and many other tributaries. The Plan evaluates existing flooding problems and identifies flood management options as well as a funding mechanism to achieve Plan recommendations. While the study focuses on flooding, it acknowledges the broader context of natural hazards and the need for integrated management. It does not explicitly reference the LHMP, its objectives align with broader hazard mitigation goals.	PCFCWCD utilizes this multi-jurisdictional plan and is continually coordinating with the County and other jurisdictions to ensure best practices and mitigation measures are implemented to reduce long term hazard impacts.	District Manager

While the above plans are not explicitly integrated with the 2021 MJHMP, the objectives of each plan align with the countywide hazard mitigation goals. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The positions noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

26.5.3 Development and Permitting Capability

The Placer County Flood Control and Water Conservation District is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County or incorporated agencies within the County.

26.5.4 Administrative Capability

Table 26-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 26-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Community Development Resource Agency	Utilize resources of Placer County and local communities
Public Works/Highway Department	Utilize resources of Placer County and local communities
Construction/Building/Code Enforcement Department	Utilize resources of Placer County and local communities
Emergency Management/Public Safety Department	Utilize resources of Placer County and local communities
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	PCFCWCD staff manage the County's annual stream channel maintenance program.
Mutual aid agreements	Utilize resources of Placer County and local communities
Other	District Board of Directors and Technical Advisory Committee

26.5.5 Technical Capability

Table 26-5 summarizes potential staff and personnel resources available to the District and their current responsibilities that contribute to hazard mitigation.

Table 26-5. Technical and Staffing Capabilities

Resources	Description, Expansion, Improvement
Planners or engineers with knowledge of land development and land management practices	PCFCWCD District Manager and Development Review Coordinator have Civil Engineering backgrounds with hazards and mitigation expertise and training including that for land development. Staff coordinate effectively with other agencies within Placer County and utilize additional staff resources from Placer County and local communities
Engineers or professionals trained in building or infrastructure construction practices	Utilize resources of Placer County and local communities
Planners or engineers with an understanding of natural hazards	PCFCWCD District Manager and Development Review Coordinator have Civil Engineering backgrounds with natural hazards and mitigation expertise and training. Staff coordinate effectively with other agencies within Placer County and utilize additional staff resources from Placer County and local communities.
Transportation planner	Utilize resources of Placer County and local communities
Staff with expertise or training in benefit/cost analysis	Utilize resources of Placer County and local communities
Professionals trained in conducting damage assessments	Utilize resources of Placer County and local communities
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Utilize resources of Placer County and local communities. Development Coordinator provides internal GIS support.
Staff that work with socially vulnerable populations or underserved communities	Utilize resources of Placer County and local communities
Full-Time Building Official	Utilize resources of Placer County and local communities
Environmental scientist familiar with natural hazards	Utilize resources of Placer County and local communities
Surveyor(s)	Utilize resources of Placer County and local communities
Floodplain Administrator	Utilize resources of Placer County and local communities
Emergency Manager	Utilize resources of Placer County and local communities
Grant Managers and/or Writer(s)	PCFCWCD has received and managed the following grants: FEMA CTP, State DWR Prop 84 Integrated Regional Water Management (IRWM), DWR Flood Corridor Protection Program, DWR FERP, and DWR Urban Streams Restoration Program (USRP).
GIS Coordinator/Analyst	Utilize resources of Placer County and local communities. Development Coordinator provides internal GIS support.
Resilience Officer or Planner	Utilize resources of Placer County and local communities
Other (this could include stormwater engineer, environmental specialist, etc.)	PCFCWCD's Emergency Flood Response Handbook-updated annually

26.5.6 Fiscal Capabilities

Table 26-6 summarizes financial resources available to the District.

Table 26-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	PCFCWCD General Fund
Impact fees for homebuyers or developers of new development/homes	Dry Creek Trust Fund; used for regional flood control projects within the watershed.
Other federal or state Funding Programs	FEMA CTP program for floodplain mapping studies, California Prop 84 IRWM grant, California DWR Flood Corridor Protection Program grant, State DWR USRP grant, and State DWR FERP grant.

26.5.7 Education and Outreach Capability

Table 26-7 summarizes the education and outreach resources available to the District.

Table 26-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Utilize resources of Placer County and local communities
Personnel skilled or trained in website development	Utilize resources of Placer County and local communities
Hazard mitigation information available on your website	Utilize resources of Placer County and local communities
Social media for hazard mitigation education and outreach	Utilize resources of Placer County and local communities
Community newsletter	Utilize resources of Placer County and local communities
Citizen boards or commissions that address issues related to hazard mitigation	American River Basin Watershed Collaborative: District staff attend meetings
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	Utilize resources of Placer County and local communities
Natural disaster/safety programs in place for schools	Utilize resources of Placer County and local communities
Organizations that conduct outreach to socially vulnerable populations and underserved communities	Utilize resources of Placer County and local communities
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	FEMA floodplain mapping public outreach for revised and new mapping released. FEMA Flood Mitigation Assistance Program (FMA) to assist with residential and commercial building elevation projects.

26.5.8 Community Classifications

Classifications for community programs are not applicable to the Placer County Flood Control and Water Conservation District.

26.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 26-8 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 26-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Moderate
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Strong
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Strong - The District monitors and manages hydrologic impact from storm events throughout Placer County utilizing a system of real-time flood warning gages operated by both the District and surrounding area partner agencies.
High Winds and Tornadoes	Weak
Wildfire	Weak

26.6 National Flood Insurance Program

Placer County Flood Control and Water Conservation is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District’s jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the LHMP for Placer County and annexes for other incorporated areas within the County.

26.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer County Flood Control and Water Conservation District's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

26.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 26-2 through Figure 26-7. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which the District has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 26-2. Avalanche Hazard Area

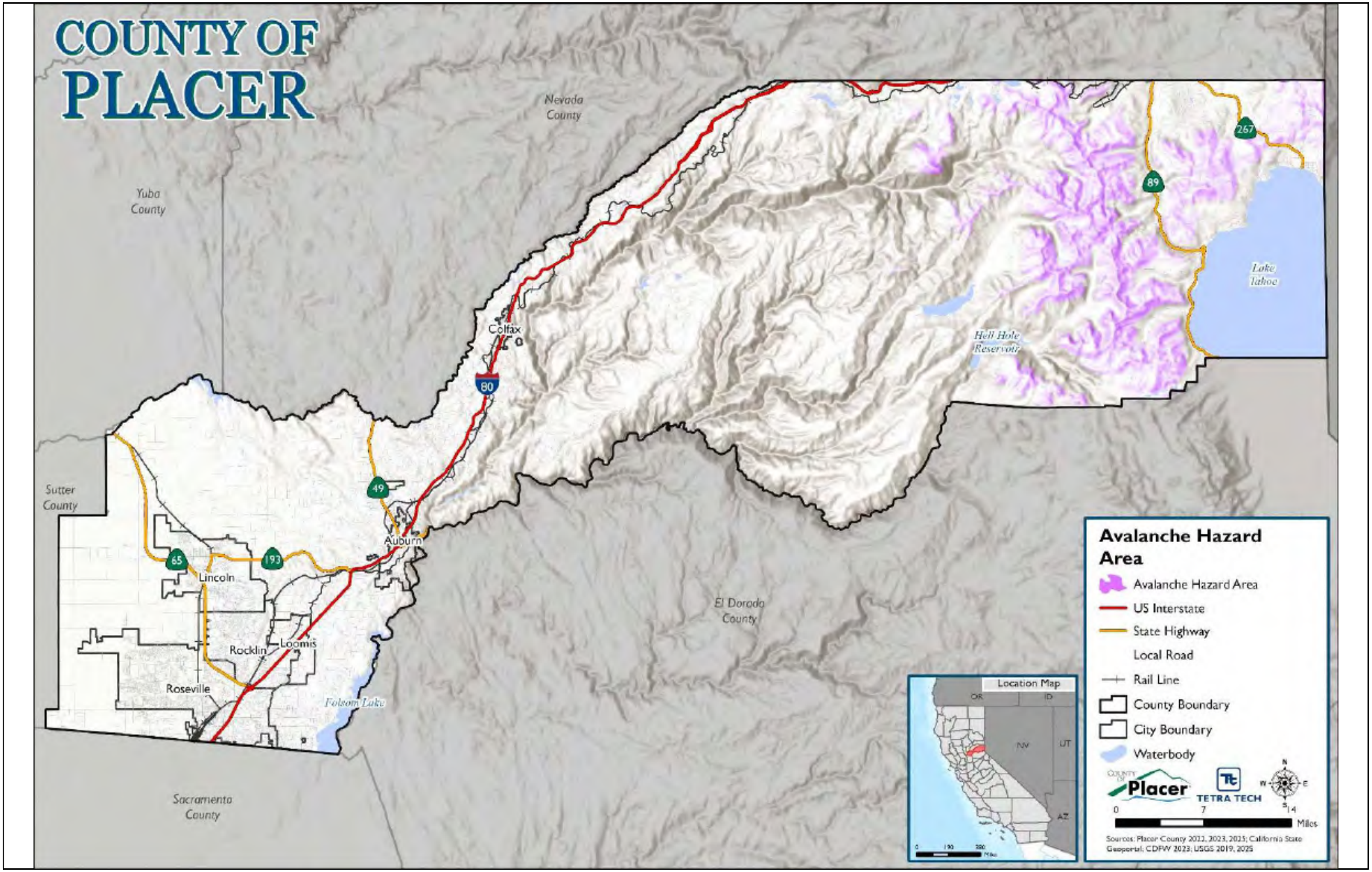


Figure 26-3. Dam Inundation Hazard Area

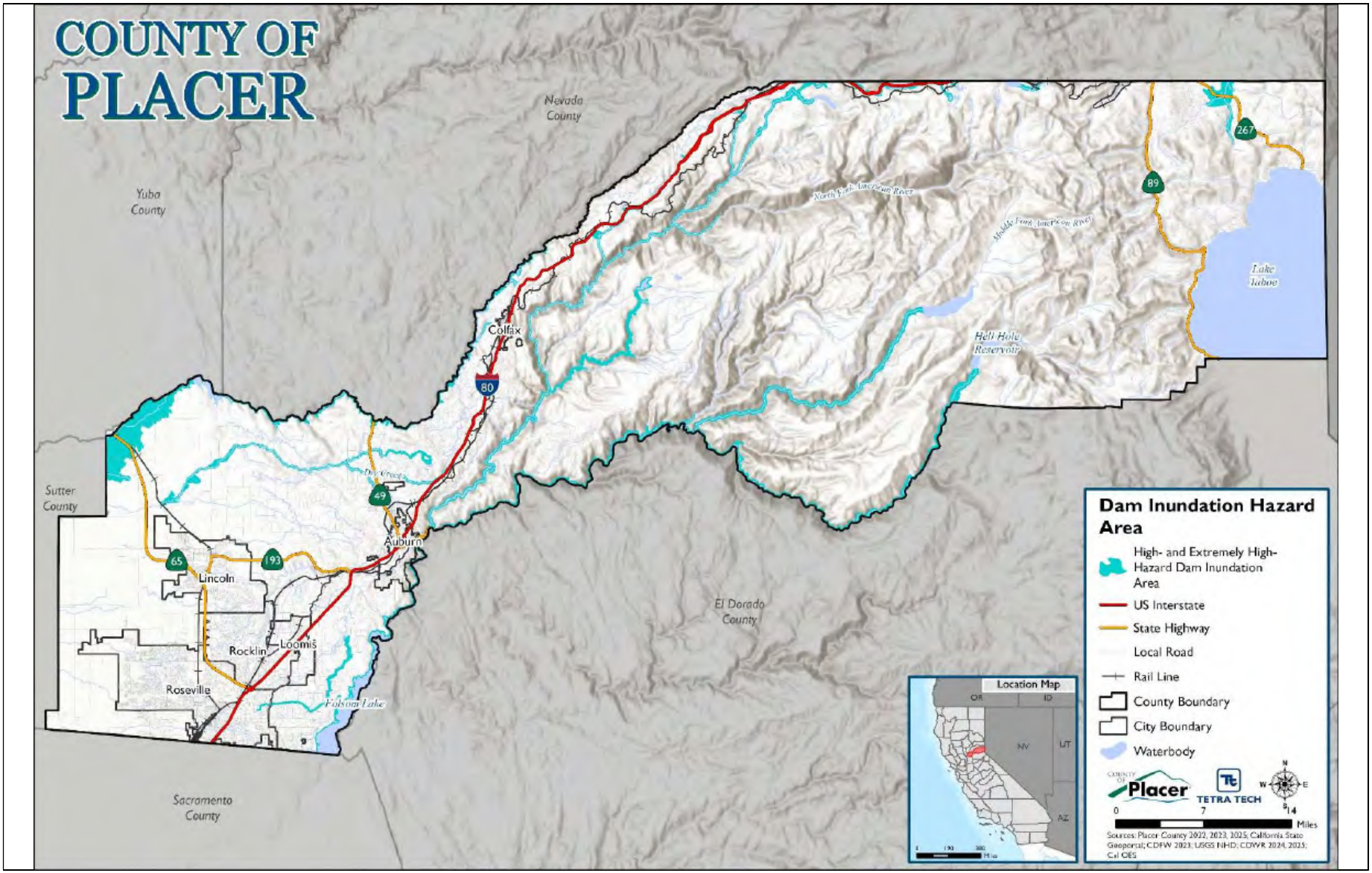


Figure 26-4. Flood Hazard Area

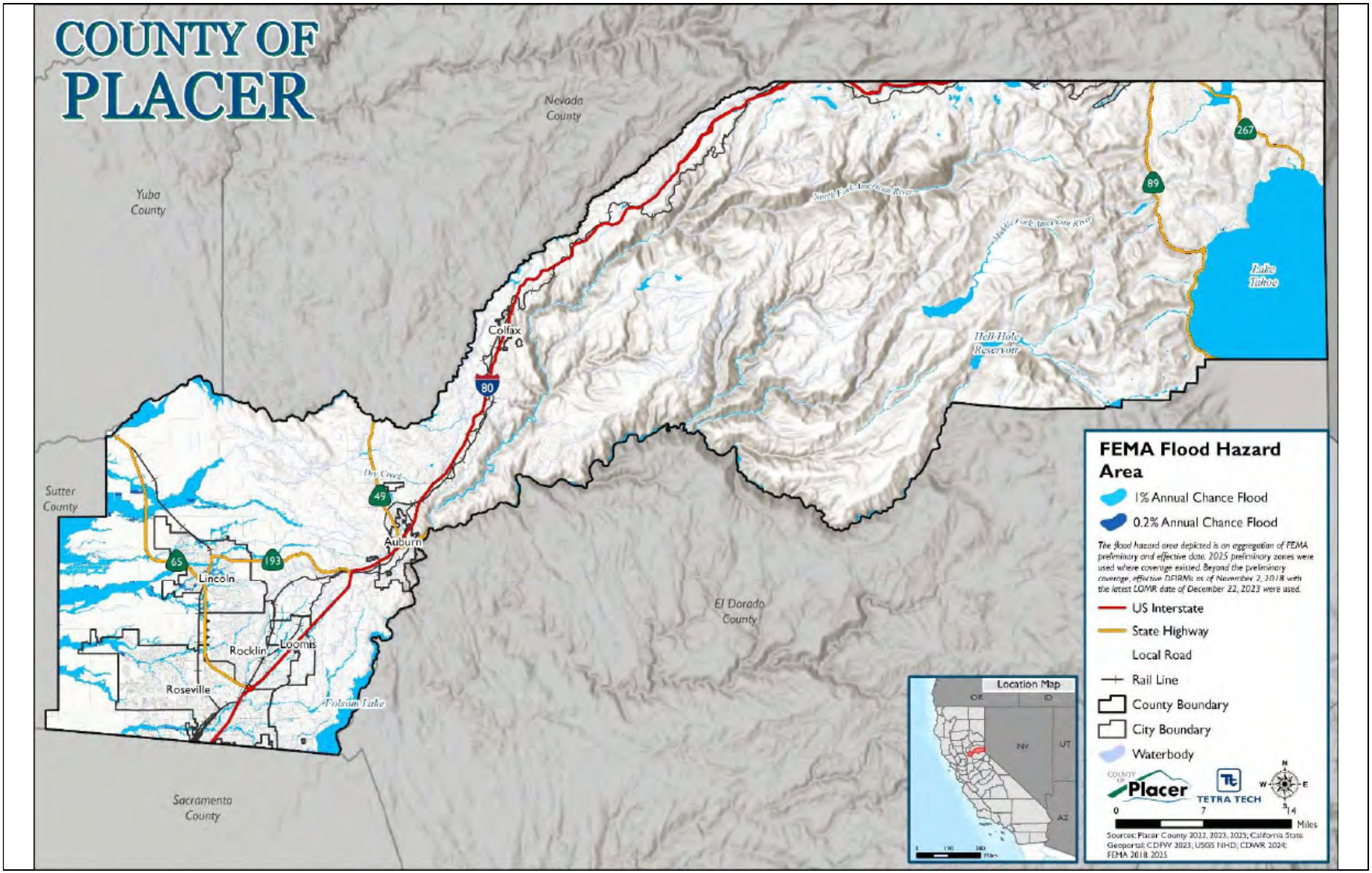


Figure 26-5. Landslide Hazard Area

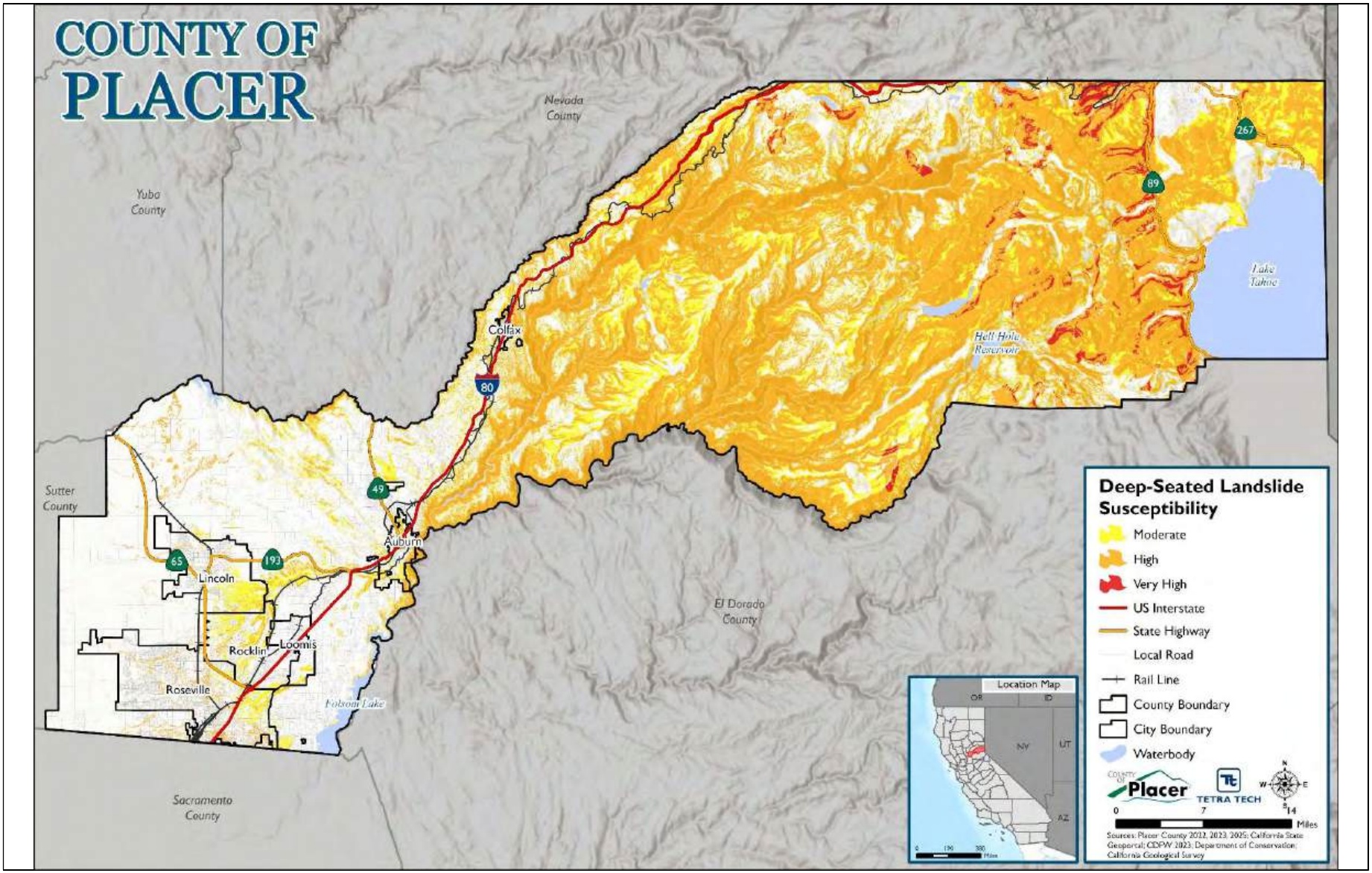


Figure 26-6. NEHRP Soil Class D Hazard Area

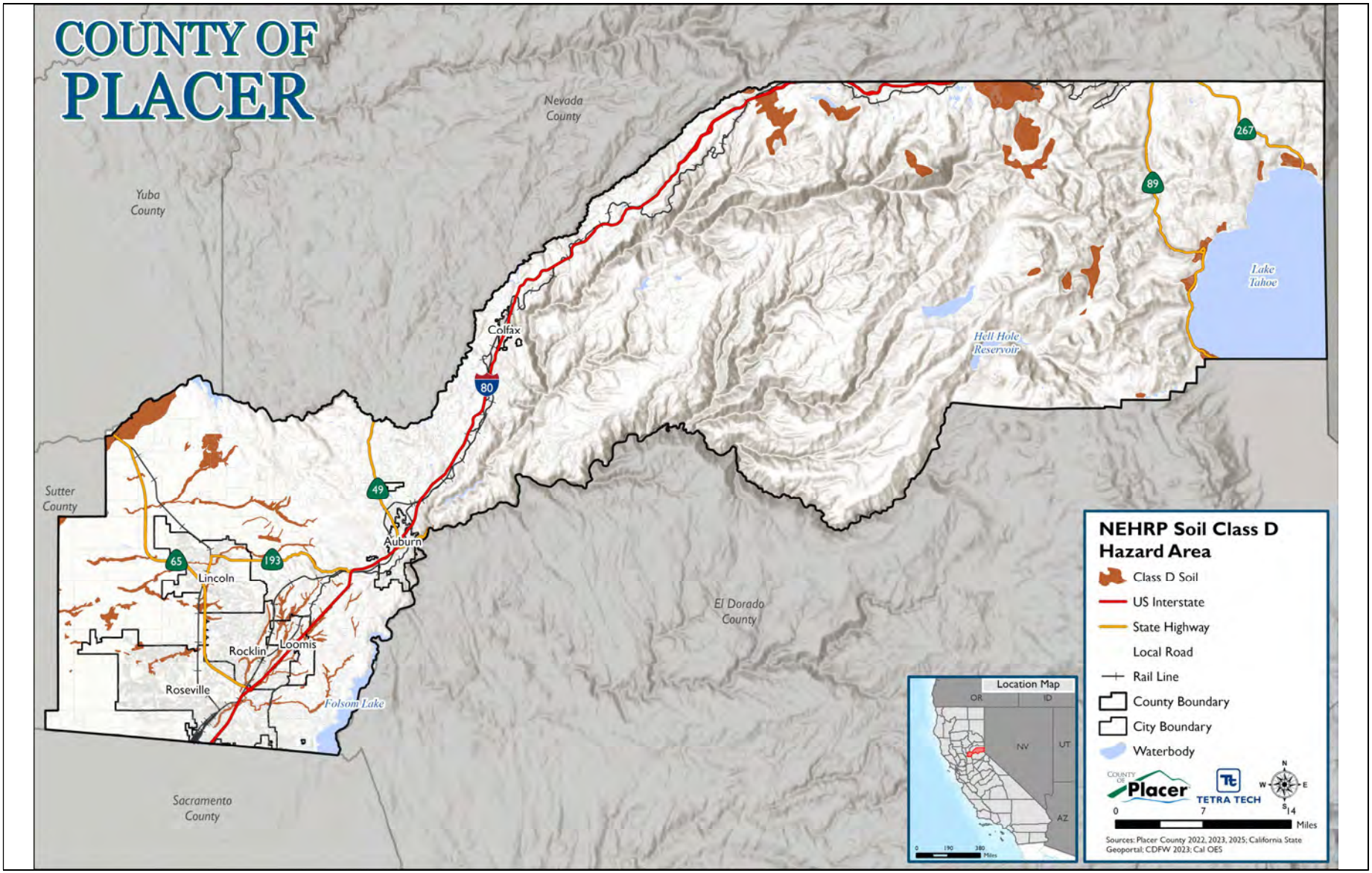
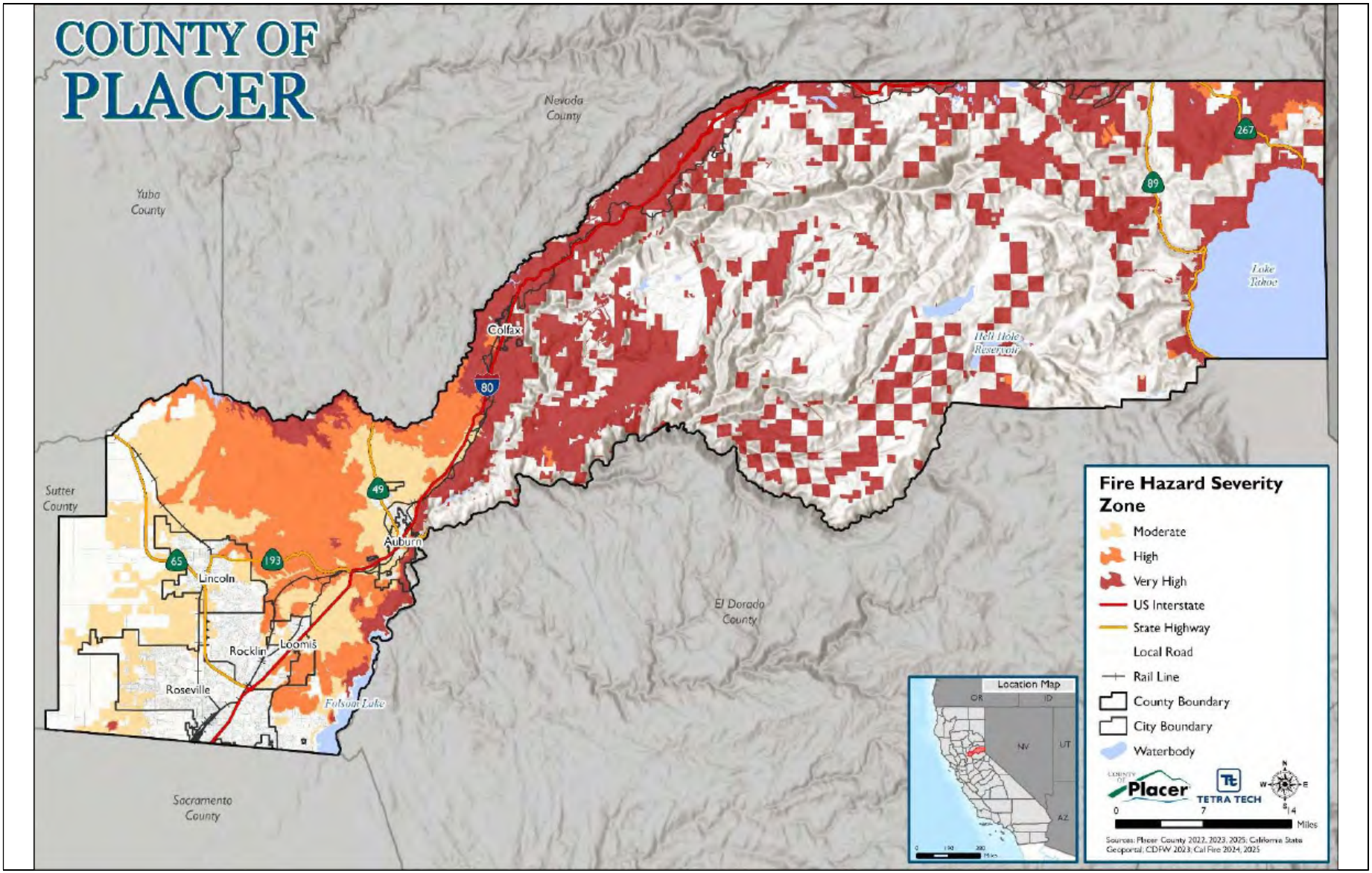


Figure 26-7. Wildfire Hazard Area



26.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 26-9 provides details on loss and damage in the District during hazard events since the last hazard mitigation plan update.

Table 26-9. Hazard Event History in the District, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
October 24, 2021	October 24, 2021	Flooding	A rare very strong fall Atmospheric River event considered to be a AR4 to AR 5 level brought heavy rains impacting Northern California. The event resulted in 5-7 inches of rain within the Dry Creek watershed and up to 12 inches of rain within the Cross Canal watershed over a few day period.	District staff monitored weather forecasts and ALERT flood warning system rainfall intensities and stream levels that included staff overtime. District staff coordinated with member agency staff and residents within Placer County to assist with drainage-related and flooding concerns. District and Placer County OES staff to evaluate observed flooding and consider issuing a Everbridge warning to residents, which was not issued as the heavy rainfall and severe flooding concerns subsided. Several areas of localized flooding occurred along with downed trees and debris accumulation within streams. District staff received over 200 rainfall alarms during this event from the ALERT flood warning system observing 10-year to 50-year rainfall intensities. The District's Miners Ravine Off Channel Detention Basin was engaged for the first time since construction was completed in 2006 as Miners Ravine reached the flood elevation threshold to trigger the basin inlet slide gate.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	District staff monitored weather forecasts and ALERT flood warning system rainfall intensities and stream levels that included staff overtime. District staff coordinated with member agency staff and residents within Placer County to assist with drainage-related and flooding concerns. District also coordinated with and Placer County staff to evaluate observed flooding and issue a Level 1 Everbridge warning to residents within Joe Rodgers area of Granite Bay due to high amounts of rainfall and potential flooding. Several areas of localized flooding occurred and Dry Creek overtopped Walerga Rd. District staff also corresponded with residents regarding flooding concerns.
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	District staff monitored weather forecasts and ALERT flood warning system rainfall intensities and stream levels that included staff overtime. District staff actively coordinated with member agency staff and residents within Placer County to assist with drainage-related and flooding concerns. District staff also coordinated with and offered support to property owners that observed failure of a small private dam in the Dry Creek watershed. Several areas of localized flooding were observed and this event resulted in the Dry Creek at Vernon Street gage reaching nearly 5,700 cfs on Jan 1 that was approximately between a 10-year and 25-year recurrence event.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	District staff monitored weather forecasts and ALERT flood warning system rainfall intensities and stream levels. District staff actively coordinated with member agency staff and residents within Placer County to assist with drainage-related and flooding concerns. District staff also coordinated with and offered support to property owners that observed failure of a small private dam in the Dry Creek watershed. Several areas of localized flooding were observed.
March 7, 2023	March 9, 2023	Heavy Snow	A cold winter storm brought low snow levels, with accumulating snow extending into the northern Sacramento Valley and the foothills. Accumulated heavy snow from a series of storms caused the roof of a school in Nevada City to collapse. There was 3.6 inches of snow reported 2 NNW of Nevada City on the 8th, but this was in addition to previous snow and road from earlier storms.	District staff monitored weather forecasts and ALERT flood warning system rainfall intensities and stream levels. District staff actively coordinated with member agency staff and residents within Placer County to assist with drainage-related and flooding concerns.
February 4, 2024	February 5, 2024	High Wind, Flood	A major winter storm moved in from the south on February 4th, bringing heavy rain, strong winds, thunderstorms and heavy mountain snow through February 7th. Damaging winds brought down trees and caused widespread power outages. Flooding and strong winds resulted in multiple fatalities. Chain controls were observed in the mountains. Heavy rain brought nuisance flooding on roads and urban areas and rises to rivers, creeks and streams, with generally 1 to 3 inches of storm total rain reported across the Valley and foothills. Numerous reports of downed power lines and trees across the area, closing roads and damaging cars. California Highway Patrol and Placer County OES reported a fatality of a driver. Nevada County Air Park reported a max gust of 52 mph. Nevada County OES reported widespread power outages and downed trees across roads and into structures, with moderate impacts to telecommunications. El Dorado County OES reported 40 calls for service related to trees and wires down, at least 5 buildings struck by trees, and 1 uninjured person trapped in a mobile home from a tree on top of the home.	District staff monitored weather forecasts and ALERT flood warning system rainfall intensities and stream levels. District staff actively coordinated with member agency staff and residents within Placer County to assist with drainage-related and flooding concerns.

26.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

The District reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- **Dam and Levee Failure:** The ranking was changed from Low to High to maintain consistency with previous LHMPs, as dam or levee failure could result in severe impacts such as loss of life, injuries, flooding, and damage to property and infrastructure, even though the probability is low.
- **Drought and Water Shortage:** The ranking was changed from Low to Medium because drought is a regional concern that affects agriculture, manufacturing, tourism, and domestic water use, and previous LHMPs identified this hazard as Medium.
- **Flood:** The ranking was changed from Low to High to reflect the District's history of flooding and its potential for significant impacts on structures, utilities, landscapes, and life safety, as well as erosion, sedimentation, and economic losses.
- **Heavy Rains and Storms:** The ranking was changed from Low to Medium because these events occur frequently and can cause localized flooding and damage to property and critical facilities, making them a significant operational concern for the District.
- **Wildfire:** The ranking was changed from High to Medium to align with previous LHMPs, as wildfire remains a concern for the District due to its potential to damage facilities and increase flooding and debris flow risks, even though impacts are considered moderate.

Table 26-10 shows PCFCWCD 's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 26-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	High
Drought and Water Shortage	Medium
Earthquake	Low
Flood	High
Freeze and Snow	Low
Heavy Rains and Storms	Medium
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	Medium

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

26.7.4 Vulnerability Assessment

Table 26-11 lists issues related to the top hazards of concern for Placer County Flood Control and Water Conservation District. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 26-11. Hazard Issues

Issue	Related Hazard
The District and the City ALERT flood warning systems, including base station equipment, gage transmitters, and software previously utilized outdated Legacy ALERT protocol. The District is in the process of increasing the capabilities of the system by converting to ALERT2.	Dam and Levee Failure, Heavy Rains and Storms, Flood, Drought and Water Shortage, Wildfire
Some existing FEMA Flood Insurance Rate Maps (FIRMs) for Placer County are outdated and no longer represent current hydrologic or topographic conditions in areas of new development, population, growth, and unstudied approximate Zone A areas.	Dam and Levee Failure, Heavy Rains and Storms, Flood, Drought and Water Shortage, Wildfire
Historically, flooding in the Dry Creek and Cross Canal watersheds has been a major concern. Placer County is not only concerned with existing flooding problems, but with future problems resulting from increased growth and development in the area.	Dam and Levee Failure, Flood, Heavy Rains and Storms
The flood control plan for the Cross Canal watershed is outdated having been performed in 1993. Rapid urbanization within this watershed has occurred and is projected to continue with significant impacts to creeks within the watershed due to increasing amounts of impervious surfaces and altered land uses. Updated hydrology and hydraulic models are now available for many streams within this watershed and can be referenced for both flood control and land use planning purposes.	Dam and Levee Failure, Heavy Rains and Storms, Flood

26.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 26-12 describes the potential impacts of the hazards of local concern to the District (hazards identified as medium or high risk in Table 26-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 26-12. Hazard Impacts

Hazard	Potential Impacts
Dam and Levee Failure	A dam or levee failure could result in catastrophic flooding, causing loss of life, injuries, and extensive damage to property, infrastructure, and critical facilities. Secondary impacts may include disruption of transportation, economic losses, and environmental degradation. The District coordinates closely with Placer County OES, private facility owners, other Districts, and water purveyors in Placer County such as Placer Water Agency (PCWA) and Pacific Gas and Electric (PG&E). This includes coordination regarding high-hazard dams that can impact Placer County such as Christian Valley, Drum Forebay, Halsey Forebay, Hinkle, Kelley Lake, Kidd Lake, L.L. Anderson, Lake Alta, Lake Arthur, Lake Theodore, Lake Valley, Lakewood, Lower Hell Hole Reservoir, Lower Peak, Mammoth Reservoir, Putts Lake, Northstar Reservoir A, Rock Creek, Spring Valley Ranch, Sugar Pine, Upper Peak Lake, French Meadows Reservoir, and other related storage facilities. These facilities represent the most significant dam failure risk sources with the potential to impact Placer County and downstream jurisdictions.
Drought and Water Shortage	Prolonged drought conditions can significantly reduce water availability for agriculture, manufacturing, tourism, and domestic use. Impacts include economic losses, strain on water systems, and increased vulnerability to wildfires and other secondary hazards.
Flood	Flooding can damage structures, utilities, and landscapes, disrupt transportation, and pose life safety risks. Additional impacts include erosion, sedimentation, water quality degradation, loss of environmental resources, and long-term economic consequences.
Heavy Rains and Storms	Severe storms and heavy rainfall can lead to localized flooding, property damage, and infrastructure stress. These events may disrupt operations, cause road closures, and increase maintenance needs for managed facilities.
Landslides, Mudslides, and Debris Flow	Slope failures and debris flows can damage roads, utilities, and structures, isolate communities, and create hazardous conditions for emergency response. These events often occur in areas with steep terrain or post-wildfire burn scars.
Wildfire	Wildfires can destroy vegetation, damage structures, and threaten public safety. They also increase the risk of flooding and debris flows within affected watersheds, creating long-term impacts on infrastructure and natural resources.

26.7.6 Changing Conditions That May Impact Risk

Population and development changes for PCFCWCD are consistent with those identified in Chapter 2 County of Placer. Since the previous plan was approved, booming population and development have increased the vulnerability of the District.

26.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

26.8.1 Changes in Community Priorities

The District prioritizes reducing flood risk and enhancing resilience through comprehensive planning, infrastructure improvements, and advanced monitoring systems. Key efforts focus on improving flood forecasting and warning capabilities, refining watershed data to guide decision-making, and implementing regional strategies to manage stormwater and reduce downstream impacts.

26.8.2 Past Mitigation Action Status

Table 26-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 26-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project Name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	The District, coordinating closely with local member agencies, has prepared a list of additional study areas within Placer County recommended to be considered for the next round of Risk Map (CTP No. 4) floodplain mapping studies. Eleven areas were identified as priority stream limits, with consideration given to communities at flood risk, population growth, new development, peak flow increases, recent flooding history and changes to special flood hazard areas. A significant portion (approximately 15 miles) of the remaining un-mapped Zone A areas within the County, Roseville, and Lincoln was included in the request. The total length of proposed new study area, including all existing A and AE zone reaches amounts to approximately 33 miles. The map provided below depicts the FEMA FIRM mapping status and proposed new mapping/study reaches for Placer County. This effort would provide hydrologic modeling and data sufficient for FEMA's contractor to utilize this information to produce future updated DFIRM mapping. The proposed new mapping study areas are shown in Figure 32.8. Additional and more accurate DFIRM mapping of new study areas will enable the County to better manage their floodplains and reduce flood risk.	FEMA CTP DFIRM Mapping Study	Not Complete	Yes	
2	Historically, flooding in the Dry Creek and Cross Canal watersheds has been a major concern. Placer County is not only concerned with existing flooding problems, but with future problems resulting from increased growth and development in the area. Specifically,	Pursue Regional Detention and	Not Complete	Yes	

Action Number	Project Description	Project Name	Status	Include in new strategy?	IF NO, explain why no longer relevant
	this action recommends projects be pursued for regional detention and retention within the Dry Creek and Cross Canal watersheds. Implementation of the regional Antelope Creek Flood Control Project is currently the highest regional priority project for the District. This site was identified within the updated 2011 Dry Creek Watershed Flood Control Plan prepared for the District. The first phase of the Antelope Creek Flood Control Project (i.e., the upstream weir of two proposed) was completed in 2018. Implementation of regional detention and retention projects will reduce future flood-related losses. It is recommended the District continue to attempt to partner with Placer County regarding a possible regional retention project on the Scilacci Farms project in the Cross Canal watershed, along Raccoon Creek.	Retention Projects within the Dry Creek and Cross Canal Watersheds			
3	The flood control plan for the Cross Canal watersheds is outdated having been performed in 1993. Rapid urbanization within this watershed has occurred and is projected to continue with significant impacts to creeks within the watershed due to increasing amounts of impervious surfaces and altered land uses. Updated hydrology and hydraulic models are now available for most creeks within this watershed and can be referenced for both flood control and land use planning purposes.	Update the Flood Control Plan for the Cross Canal Watershed	Not Complete	Yes	
4	The Placer County Flood Control District, in conjunction with OES, has installed an ALERT flood warning system in the County consisting of 18 precipitation and stream level gages. The regional system, including ALERT gages owned and operated by the City of Roseville and Sacramento County, consists of approximately 102 rain gages and 84 stream gages. Additionally, the District monitors several rain and stream gages in the Truckee River Watershed. These ALERT gages provide the District with real-time rainfall amounts and stream level data. An upgraded system to include ALERT 2 type improvements, as well as real time flood warning gages and flood forecasting capabilities for flood-prone areas would increase the warning time for implementation of effective mitigation measures and necessary evacuations. The ALERT 2 type upgrades are being funded by the State DWR FERP program. The ALERT 2 base station improvements were implemented in 2019 with Round 2 of the FERP grant managed by the City of Roseville. The individual site upgrades will occur over the next two years under Round 3 of the FERP managed by the District.	Upgrade Flood Warning System to ALERT 2, Add Additional Gage Locations and Flood Forecasting Capabilities	Not Complete	Yes	

26.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, the District has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Flood warning system base station improvements were implemented in 2019 with a grant managed by the City of Roseville. The District has continued upgrades by adding two additional gages (Auburn Ravine at McBean and Raccoon Creek at Dowd Rd) and converting to the remaining sites from ALERT to ALERT2 protocol. The District is in the final stages of completing the ALERT2 type upgrades, resulting in enhanced flood risk warning for Placer County.

- The District), coordinating closely with local member agencies, is nearly completed with the development of additional study areas within Placer County included in the Risk Map (CTP No. 4) floodplain mapping studies. Eight areas were identified as priority stream limits, with consideration given to communities at flood risk, population growth, new development, peak flow increases, recent flooding history and changes to special flood hazard areas. Approximately 11.5 miles of the remaining un-mapped Zone A areas within the County, Roseville, and Lincoln were included in the study. The total length of proposed new study area, including all existing A and AE zone reaches amounts to approximately 37.1 miles and includes the South Yuba River, Serene Lakes, Secret Ravine, Antelope Creek, University Creek, Orchard Creek, Ingram Slough and Miners Ravine. The result of this updated mapping will result in more reliable accurate mapping to help residents accurately assess their flood risk, avoid building in the floodplain, and reduce resulting National Flood Insurance Program (NFIP) flood claims.
- The Antelope Creek Flood Control Project was identified within the updated 2011 Dry Creek Watershed Flood Control Plan prepared for the District. The first phase of the Antelope Creek Flood Control Project (i.e., the upstream weir of two proposed) was completed in 2018 and future phases continue to be high regional priority for the District.

26.8.4 Hazards Omitted from Mitigation Strategy

- **Avalanche** hazards are present in the eastern portion of Placer County within high-elevation areas of the Sierra Nevada and the Lake Tahoe Basin and are not considered a significant risk to District operations or facilities.
- **Earthquake** hazards are a statewide concern; however, earthquake impact on the Flood Control and Water Conservation District's facilities will not significantly impact operations.
- **Freeze and Snow** The District focuses on providing technical support regarding drainage and floodplain management where freeze and snow hazards are typically not a significant consideration.

26.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that the District would like to pursue in the future to reduce the risk from hazards.

Table 26-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA and CRS mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 26-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 26-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Avalanche	-	-	-	-	-	-	-	-	-	-
Dam and Levee Failure	X	X	-	-	X	-	X	-	X	X
Drought and Water Shortage	X	X	-	-	-	-	X	-	-	X
Earthquake	-	-	-	-	-	-	-	-	-	-
Flood	X	X	-	-	X	-	X	-	X	X
Freeze and Snow	-	-	-	-	-	-	-	-	-	-
Heavy Rains and Storms	X	X	-	-	X	-	X	-	X	X
High Winds and Tornadoes	-	-	-	-	-	-	-	-	-	-
Landslides, Mudslides, and Debris Flows	-	-	-	-	-	-	-	-	-	-
Wildfire	X	X	-	-	-	-	X	-	-	X

LPR = Local Plans and Regulations
SIP = Structure and Infrastructure Project
PR = Preventative Measures
PI = Public Information
SP = Structural Flood Control Projects
NSP = Natural Systems Protection
EAP = Education and Awareness Programs
PP = Property Protection
NR = Natural Resource Protection
ES = Emergency Services
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Table 26-15. Mitigation Strategy Prioritization

Action Number	Project Name4	Objectives Met	Timeline	Benefits	Costs	Score	Priority
PCFCWCD-01	Flood Warning System	6	1-5 Years	High	High	7.5	Medium
PCFCWCD-02	Flood Mapping Study	6	1-10 Years	High	High	6.5	Medium
PCFCWCD-03	Regional Detention and Retention	6	1-10 Years	High	High	6.5	Medium
PCFCWCD-04	Cross Canal Watershed Flood Control Plan	6	1-10 Years	Medium	High	5.5	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

26.8.6 Mitigation Strategy

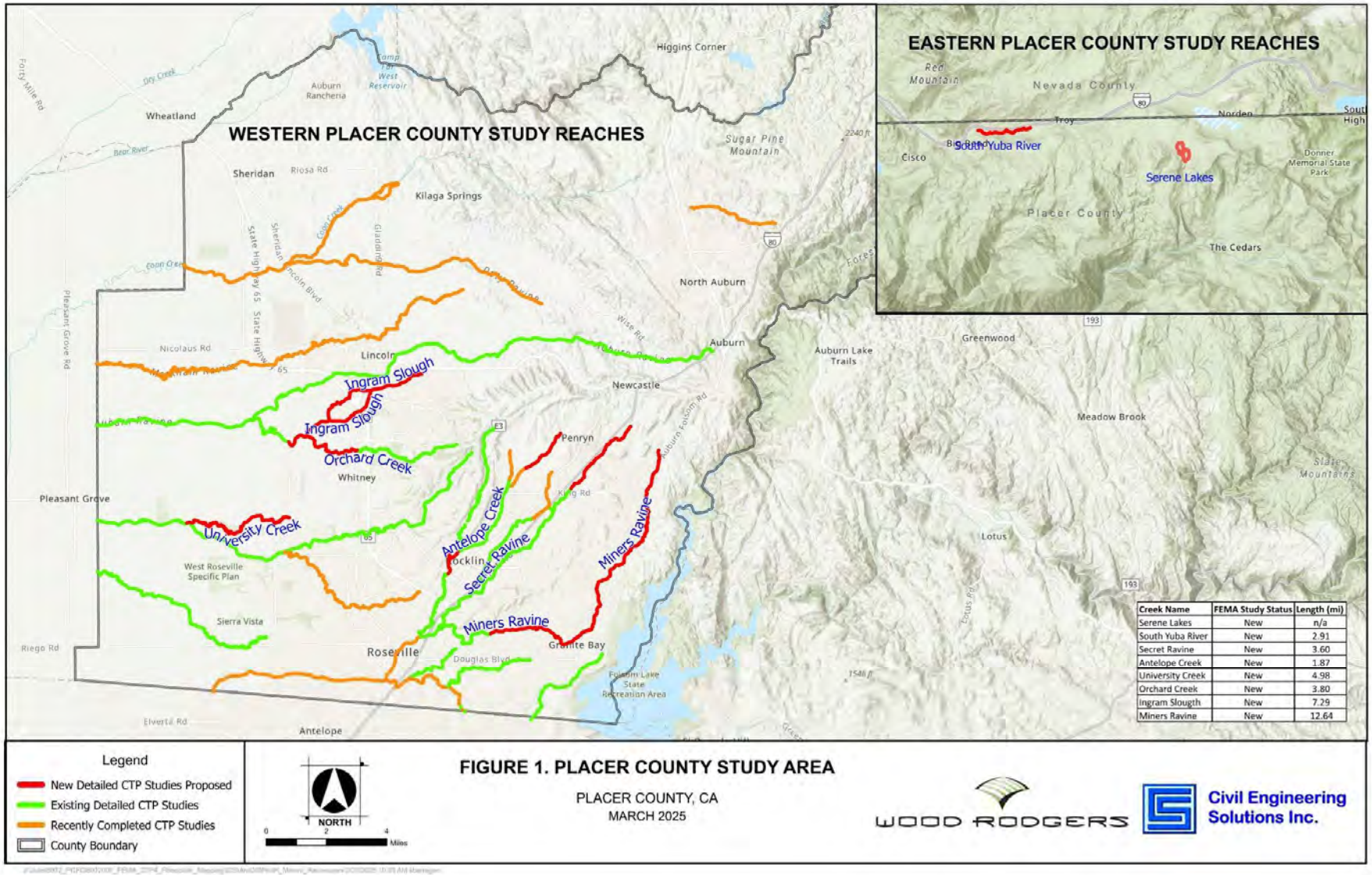
Table 26-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The Placer Flood Control District Manager will lead implementation of all projects listed in Table 26-16. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 26-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
PCFCWCD-01	Flood Warning System	Expand the capacity and level of protection provided by the ALERT system, real time flood warning gages, and flood forecasting capabilities for flood-prone areas. This project would increase the warning time for implementation of effective mitigation measures and necessary evacuations. Installation and upgrade of solar panel/battery systems and associated equipment will enhance system function. The project will provide faster and more reliable data collection, resulting in reduced flood risk for Placer County.	Dam and Levee Failure, Heavy Rains and Storms, Flood, Drought and Water Shortage, Wildfire	Placer County Flood Control and Water Conservation District, City of Roseville	California DWR FERP, FEMA Hazard Mitigation Grant Program Grant Program, District Reserves
PCFCWCD-02	Flood Mapping Study	The District, coordinating closely with local member agencies, is nearly completed with the development of additional study areas within Placer County included in the Risk Map (CTP No. 4) floodplain mapping studies. Eight areas were identified as priority stream limits, with consideration given to communities at flood risk, population growth, new development, peak flow increases, recent flooding history and changes to special flood hazard areas. Approximately 11.5 miles of the remaining un-mapped Zone A areas within the County, Roseville, and Lincoln were included in the study. The total length of proposed new study area, including all existing A and AE zone reaches amounts to approximately 37.1 miles and includes the South Yuba River, Serene Lakes, Secret Ravine, Antelope Creek, University Creek, Orchard Creek, Ingram Slough and Miners Ravine. Figure 32-8 depicts the FEMA FIRM mapping status and proposed new mapping/study reaches for Placer County. This effort provides hydrologic modeling and data sufficient for FEMA's contractor to utilize this information to produce future updated DFIRM mapping. The new mapping study areas are shown in Figure 26-8. Additional and more accurate DFIRM mapping of new study areas will enable the County to better manage their floodplains and reduce flood risk.	Dam and Levee Failure, Heavy Rains and Storms, Flood, Drought and Water Shortage, Wildfire	Placer County Flood Control and Water Conservation District, District Member Agencies, and FEMA.	FEMA CTP, District General Fund
PCFCWCD-03	Regional Detention and Retention	Implement regional detention and retention projects within the Dry Creek and Cross Canal watersheds including, but not limited to, the Pleasant Grove Stormwater Retention Basin Facility and Scilacci Farms project. These projects will reduce existing and future flood risk due to excess stormwater runoff and proposed development. Retention and detention projects can also improve groundwater recharge, mitigating drought. The implementation of these regional facilities will	Dam and Levee Failure, Flood, Heavy Rains and Storms, Drought & Water Shortage	Placer County Flood Control and Water Conservation District, District Member Agencies	FEMA Hazard Mitigation Grant Program Grant Program, Dry Creek Trust Fund, DWR

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
		help minimize potential loss of life, property damage, impact to infrastructure, and associated economic losses. In addition, the development of these regional projects helps to mitigate for future development while providing a potential fee program to fund the construction, operation, and maintenance of these facilities.			
PCFCWCD-04	Cross Canal Watershed Flood Control Plan	Develop an updated Cross Canal Watershed Flood Control Plan. Project will include, but is not limited to, flood control planning studies, including the baseline hydraulic and hydrologic data for the Cross Canal watershed, and updated land use conditions as rapid urbanization has led to increasing amounts of impervious surfaces and altered land uses, resulting in inaccurate estimation of flood risk and corresponding design standards.	Dam and Levee Failure, Heavy Rains and Storms, Flood	Placer County Flood Control and Water Conservation District, District Member Agencies,	Placer County Flood Control and Water Conservation District reserves, FEMA Hazard Mitigation Grant Program Grant, CA Governor's Office of Land Use and Climate Innovation Climate Adaptation Grants

Figure 26-8. Flood Map Study Area



27. Placer County Resource Control District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Placer County Resource Control District (Placer RCD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Placer RCD, describes who participated in the planning process, assesses Placer RCD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Placer RCD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

27.1 Hazard Mitigation Planning Team

Placer RCD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Sarah Jones, Executive Director

Address: 11641 Blocker Dr. #120, Auburn, CA 95603

Phone Number: 530-390-6680

Email: sarah@placerrcd.org

Alternate Point of Contact: Kate Espinola, Administration and Finance Manager

Address: 11641 Blocker Dr. #120, Auburn, CA 95603

Phone Number: 530-390-6680

Email: kate@placerrcd.org

The Executive Director represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 27-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 27-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Sarah Jones	Placer RCD	Executive Director	Planner
Kate Espinola	Placer RCD	Administration & Finance Manager	Planner

27.2 Community Profile

Placer RCD is an independent, self-governing entity established in 1946, committed to the conservation of natural resources. Placer RCD develops and facilitates programs in collaboration with partners to assist private landowners and public agencies in achieving conservation goals. The District plans and implements programs, services, and activities to address current and emerging natural resource priorities within Placer County.

Placer RCD's jurisdiction encompasses all of Placer County except the Tahoe Basin, covering approximately 1,400 square miles of diverse stakeholders, habitats, and elevations—from the Sacramento Valley floor across the Sierra crest to the Nevada state line. The Tahoe Basin is managed by the Tahoe Resource Conservation District.

The District's work includes a broad range of environmental resource management activities, such as habitat restoration, forestry, wildfire mitigation, erosion control, invasive species management, watershed health, and stormwater management. Its mission is to promote wise natural resource management and conservation by providing education, technical assistance, and guidance to private landowners, operators, and regional entities, both independently and in collaboration with local, state, and federal agencies.

Placer RCD implements plans and programs, manages land easements and endowments, and works to conserve and enhance natural resources while fostering public awareness and involvement in conservation efforts. The District shares many natural resource management goals with Placer County and partners closely to achieve these objectives. Participation in the planning process is essential to meet shared goals of conservation and preservation for lands within Placer County.

27.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Placer RCD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

27.3.1 Outreach Activities

Placer RCD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

27.3.2 Public Feedback Integration

No public feedback was received by the District related to hazard mitigation throughout the planning process.

27.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

27.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- Auburn Valley Community Services District
- Foresthill Public Utility District
- Sacramento Municipal Utility District
- South Placer Municipal Utility District
- Tahoe-Truckee Sanitation Agency

27.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- California Air Resources Board
- Bureau of Land Management
- Bureau of Reclamation
- Bureau of Indian Affairs

27.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around Placer County.

- Auburn Cemetery District
- Colfax Cemetery District
- Newcastle-Rocklin-Gold Hill Cemetery District
- Roseville Cemetery District

27.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around Foresthill USD. Placer RCD works closely with University of California on projects and outreach for hazard (wildfire) mitigation for the public. MNJ Advisors, CLERE INC, and Headwaters Environmental are stakeholder partners on similar Placer projects such as the Community Wildfire Protection Plan.

- Pacific Gas & Electric
- University of California Agriculture and Natural Resources
- University of California Cooperative Extension

27.4.5 Nonprofit Organizations and Community-Based Organizations

These nonprofit and community-based organizations bring valuable local knowledge, resources, and community connections to the MJHMP process. Their participation may include attending planning meetings, completing stakeholder surveys, reviewing and providing feedback on draft materials, and helping to identify hazard vulnerabilities and community priorities. Their engagement ensures that the perspectives of underserved populations, culturally significant lands, and hazard-prone communities are meaningfully incorporated into the planning effort.

- Placer Land Trust
- United Auburn Indian Community
- Tahoe Truckee Community Foundation
- 40 Acre Conservation League
- Red Cross
- North Auburn/Ophir Fire Safe Council
- Greater Auburn Area Fire Safe Council
- Placer Sierra Fire Safe Council
- Foresthill/Iowa Hill Fire Safe Council

27.5 Jurisdictional Capability Assessment

Placer RCD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer RCD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Placer RCD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

27.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 27-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 27-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Public Resource Code Division 9 2015	California Public Resources Code Division 9 provides the legal framework for Resource Conservation Districts, which are local agencies established to address soil, water, and related natural resource conservation issues. These special districts are authorized to implement projects, provide technical and educational resources, and facilitate partnerships to protect resources like soil, water quality, and wildlife habitat on both public and private lands	Placer Resource Conservation District does not have the authority to expand or improve this code.	California Department of Conservation
California Building Code Title 24, Part 2 January 1, 2026	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

27.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 27-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 27-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Placer Resource Conservation District Strategic Direction 2022-2027	The Placer RCD Strategic Direction references wildfire, open space, environmental education, prescribed burning, erosion control, and other natural resources. It includes a goal to make the forests and communities of Placer County resilient to wildfire and other threats to forest health.	The plan includes a strategy to participate in fire preparedness efforts with agencies and organizations throughout Placer County. This strategy could be expanded to include fire mitigation, which aligns with several goals and strategies in the plan.	Placer Resource Conservation District
Community Wildfire Protection Plan	This project addresses wildfire hazard within Placer County. It contains mitigation actions and a mitigation strategy to reduce wildfire risk. The CWPP is integrated with the 2021 MJHMP.	The CWPP underwent an update in 2025 and RCD participated in the planning process, contributing to the expansion and improvement of the document, although the County is the author of the plan.	Placer County Office of Emergency Services
CAL FIRE Nevada – Yuba – Placer Unit Strategic Fire Plan 2025	The 2025 Unit Strategic Fire Plan identifies and prioritizes pre-fire and post fire management strategies and tactics to reduce the loss of values at risk in Placer, Nevada, and Yuba Counties.	The plan does not reference the county hazard mitigation plans specifically but it is an excellent example of a local hazard strategy. The District contributes to the plan but CAL FIRE is the author of the plan.	CAL FIRE

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

27.5.3 Development and Permitting Capability

Placer County RCD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

27.5.4 Administrative Capability

Table 27-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 27-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Fire Resilience Coordinating Board	Supports wildfire mitigation in Placer County
Placer County Board of Supervisors	Appoints the RCD Board and supports hazard mitigation projects in Placer County

27.5.5 Technical Capability

Table 27-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 27-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Forestry and agricultural specialists	Provide technical assistance to private landowners and support hazard reduction projects in Placer County
Fuel reduction/chipper crew	Complete wildfire mitigation projects in Placer County

27.5.6 Fiscal Capabilities

Table 27-6 summarizes financial resources available to Placer County RCD.

Table 27-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Property Tax Revenue	Supports the annual budget of Placer Resource Conservation District.
CAL FIRE, California Department of Food and Agriculture, US Forest Service	Support the annual budget of Placer Resource Conservation District through grant funding.

27.5.7 Education and Outreach Capability

Table 27-7 summarizes the education and outreach resources available to Placer County RCD.

Table 27-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Hazard mitigation information available on your website	Fire safety technical assistance available on website
Education and outreach coordinator	The education and outreach coordinator coordinates outreach for wildfire mitigation and forest health education to private landowners

27.5.8 Community Classifications

Placer RCD does not currently maintain formal classifications for its community programs.

27.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 27-8 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 27-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Moderate
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Strong

27.6 National Flood Insurance Program

Placer County Resource Conservation is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

27.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer RCD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

27.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 27-1 through Figure 27-6. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Placer RCD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 27-1. Avalanche Hazard Area

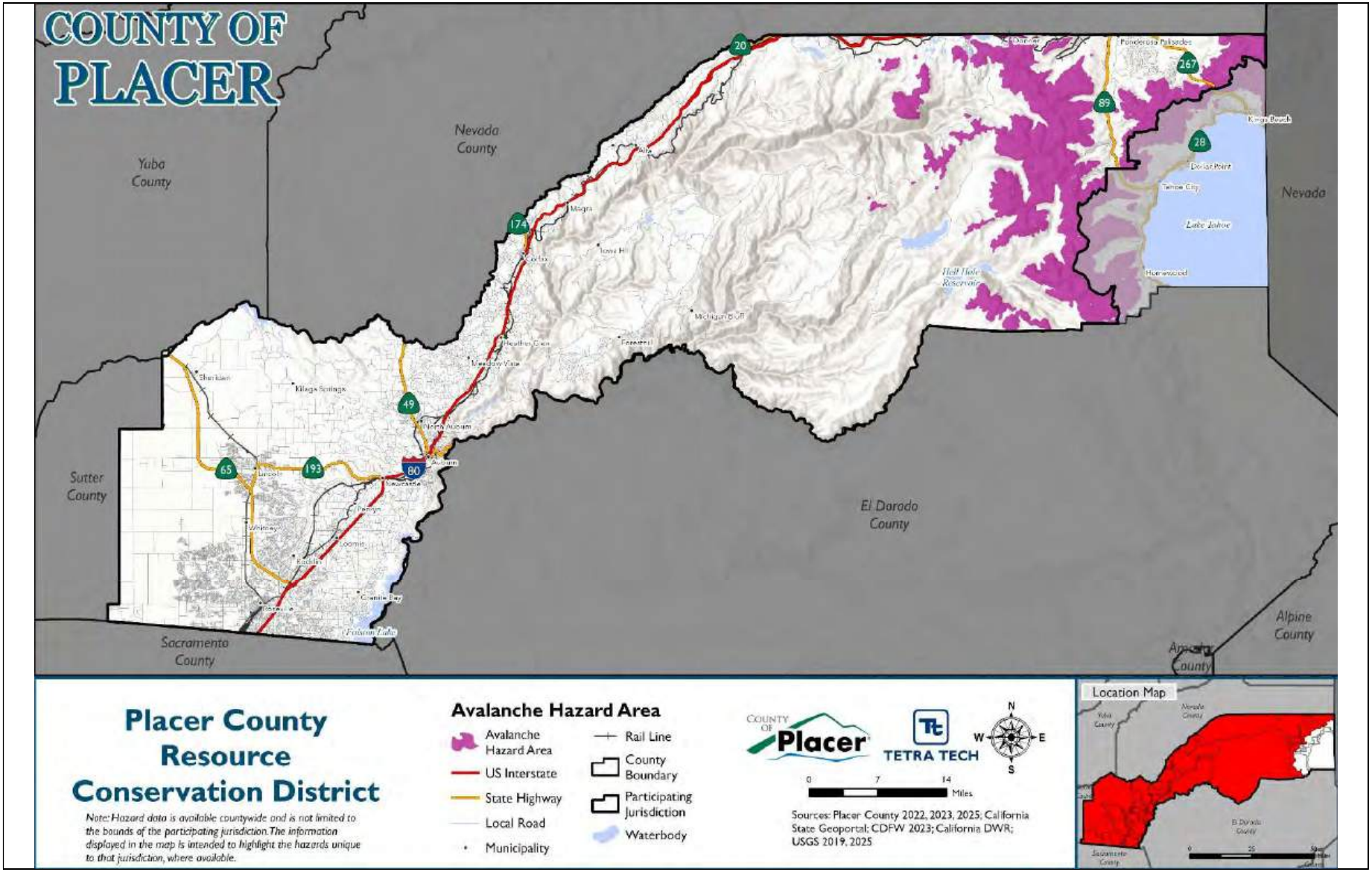


Figure 27-2. Dam Inundation Hazard Area

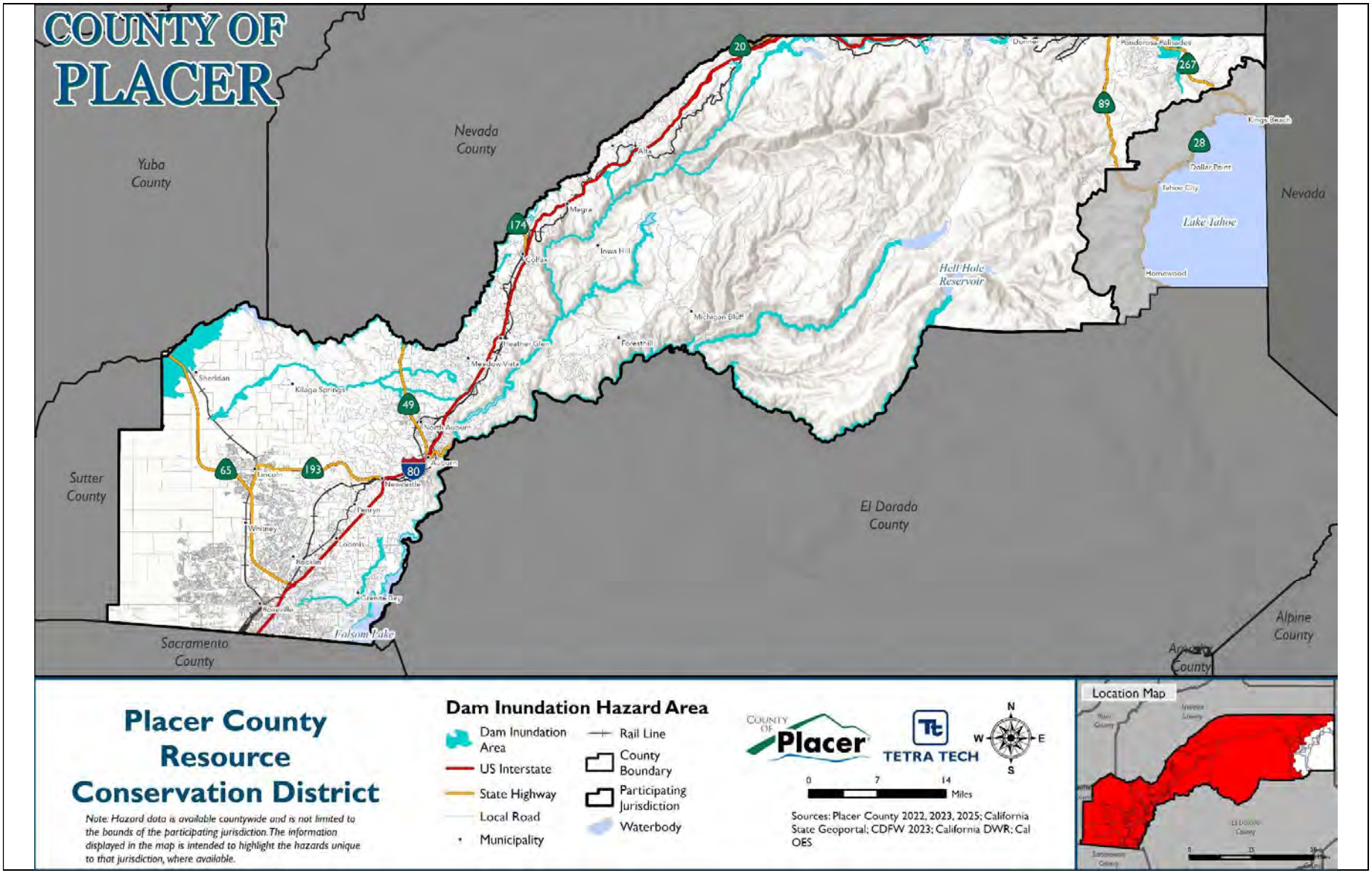


Figure 27-3. Flood Hazard Area

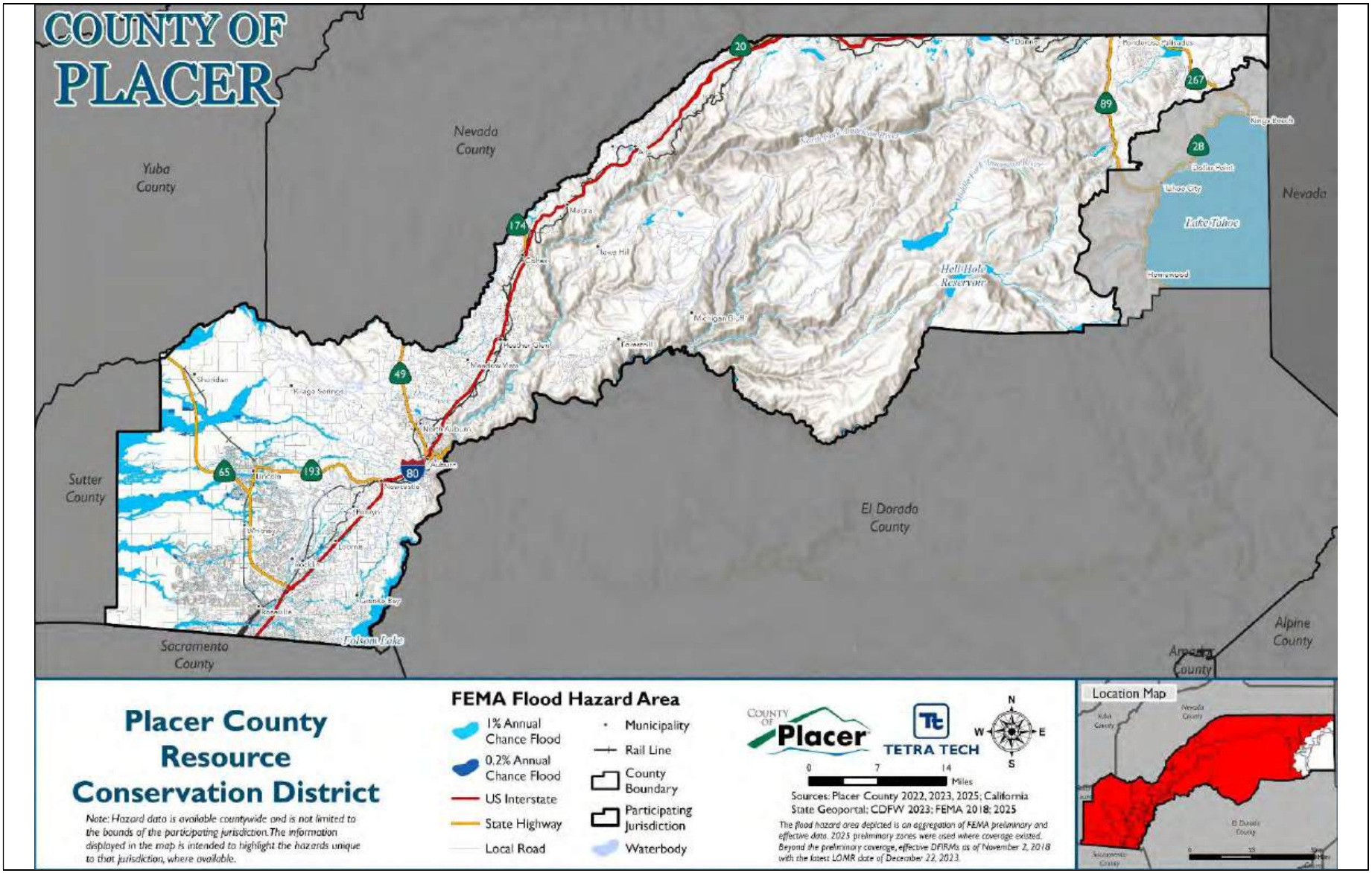


Figure 27-4. Landslide Hazard Area

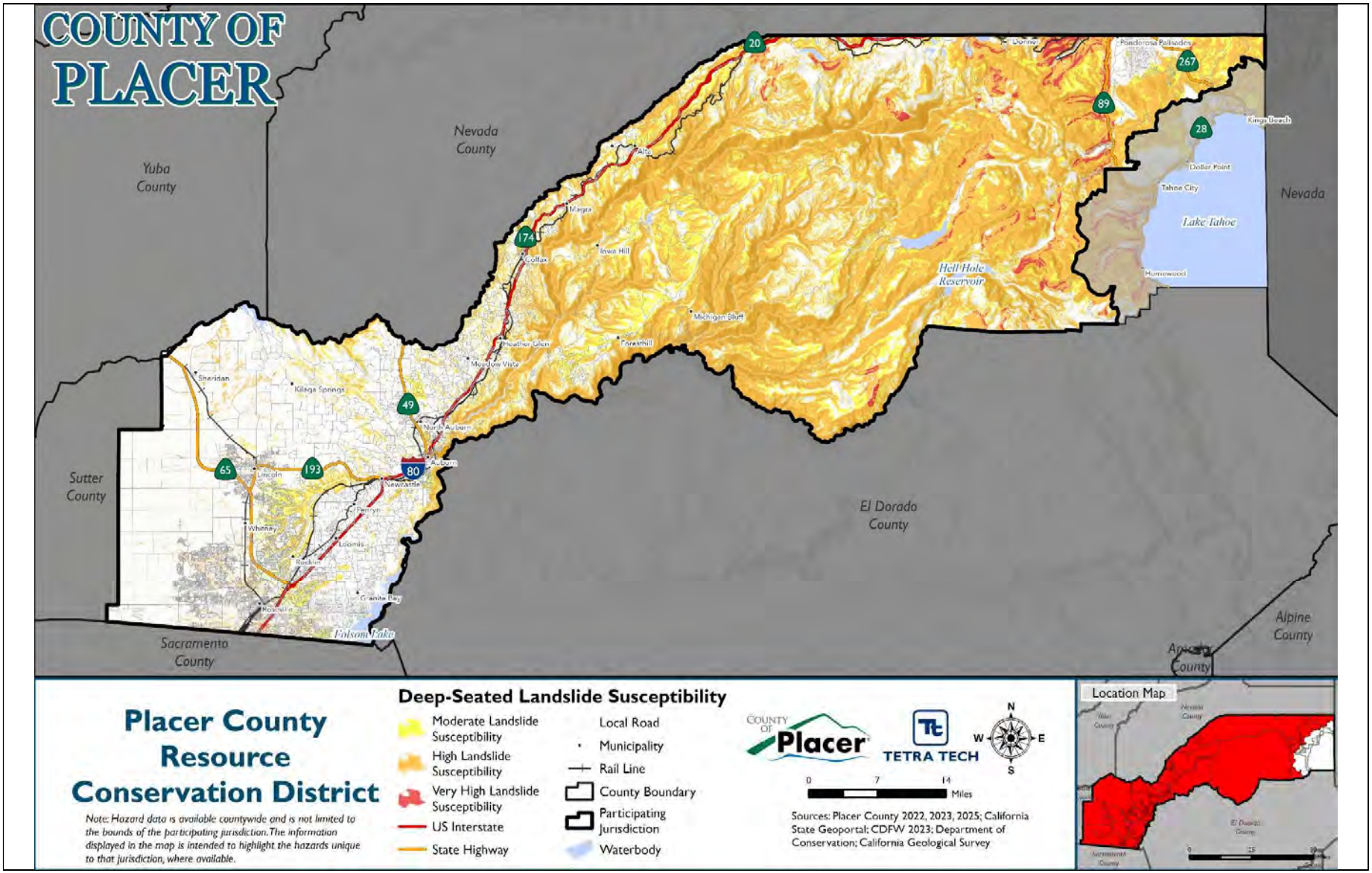


Figure 27-5. NEHRP Hazard Area

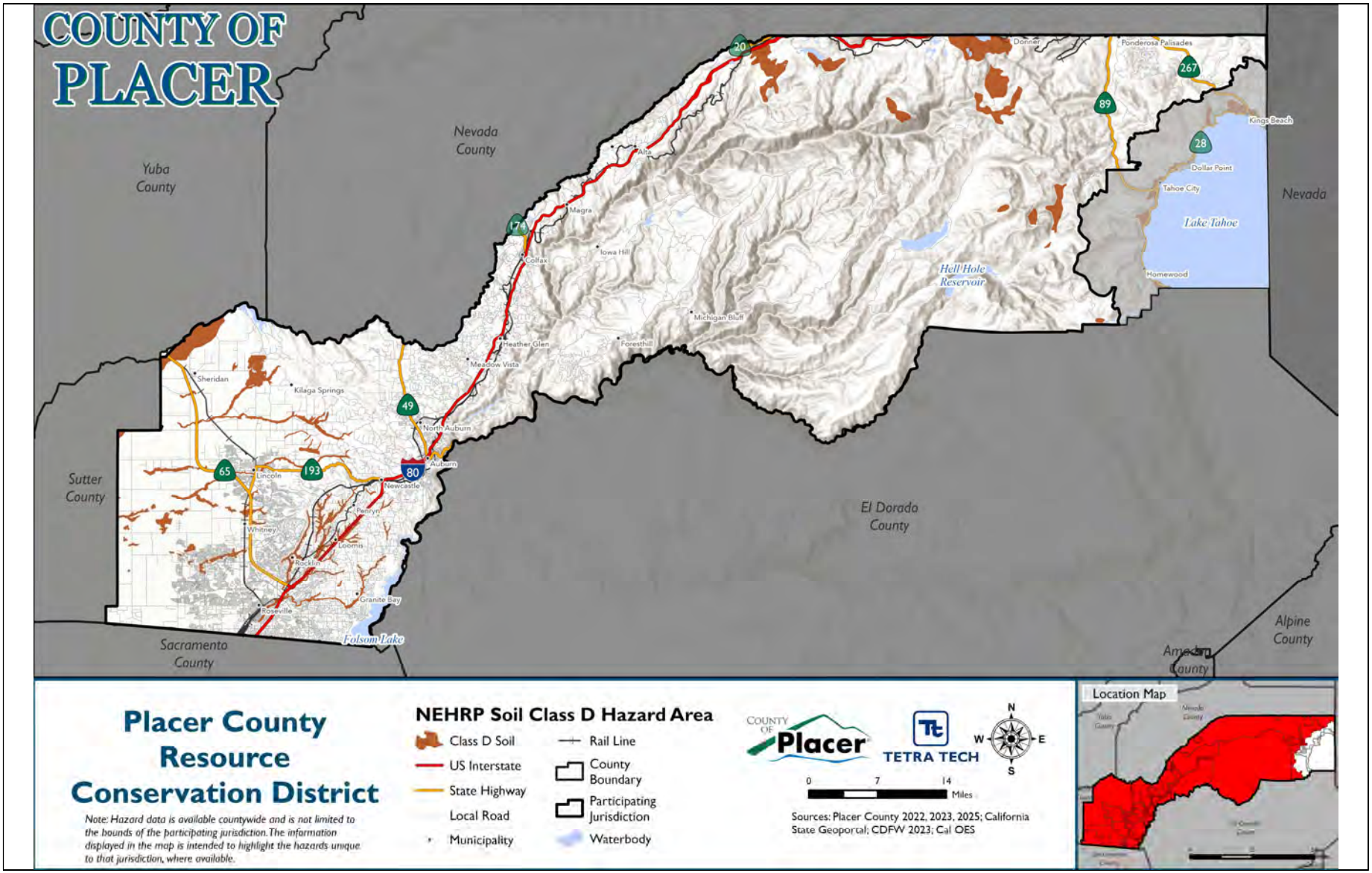
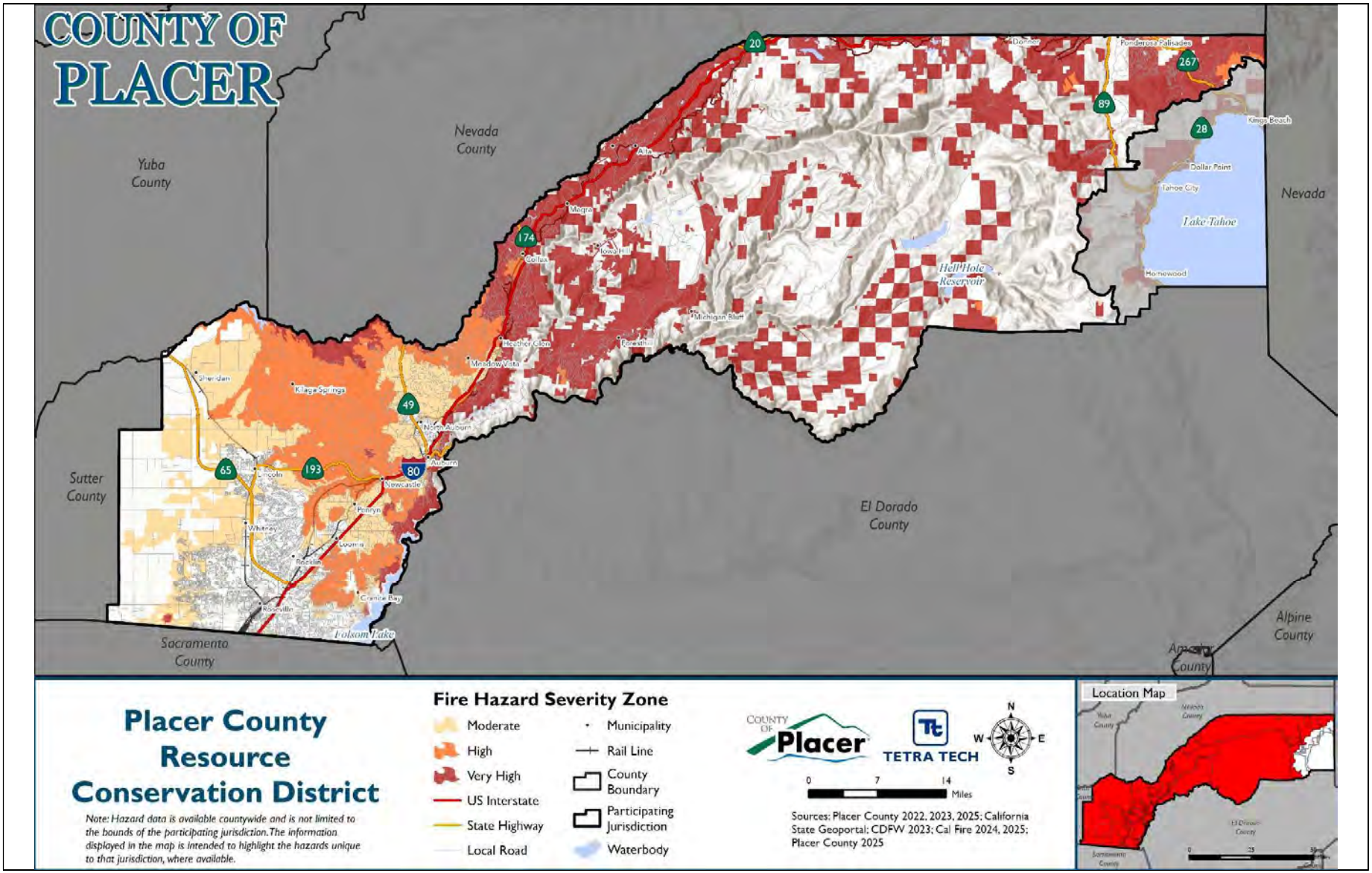


Figure 27-6. Wildfire Hazard Area



27.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 27-9 provides details on loss and damage in Placer RCD during hazard events since the last hazard mitigation plan update.

Table 27-9. Hazard Event History in Placer RCD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
June 14, 2021	June 20, 2021	Extreme Heat	Dangerously hot conditions with highs 95 to 105, except 105 to 110 across the Central Valley on Thursday and Friday. Local spots may reach 113.	Widespread high to very high heat risk with record- breaking heat possible. Extreme heat will significantly increase the potential for heat-related illnesses.
July 7, 2021	July 12, 2021	Extreme Heat	The forecast excessive heat event occurred over several continuous days starting Wed lasting thru Sun. During this period, CAISO also informed of potential Flex Alert to occur during the same period.	Forecast excessive heat occurred across the entire state over several days. CAISO issued potential Flex Alert.
August 4, 2021	August 13, 2021	Wildfire	The River Fire was a destructive 2021 wildfire that burned 2,619 acres (1,060 ha) near Colfax in Nevada County and Placer County, California.	The River Fire destroyed 142 structures, damaged 21 more, and resulted in four injuries to firefighters and civilians. The River Fire forced the evacuation of more than 7,000 people, including at least 2,400 people in Placer County.
September 5, 2021	September 14, 2021	Wildfire	The Bridge Fire ignited on September 5, 2021, beneath the Foresthill Bridge in Placer County, quickly spreading through steep terrain in the Auburn State Recreation Area. Fueled by dry conditions, the fire grew to 411 acres by the next day, prompting evacuations and a swift multi-agency response. Crews achieved full containment by September 14 after over a week of active suppression, during which one firefighter was injured. Investigators later determined the cause to be arson.	The Bridge Fire impacted multiple jurisdictions, primarily affecting the Auburn State Recreation Area managed by California State Parks, prompting full area closures and coordination with CAL FIRE for suppression. Placer County was responsible for issuing evacuation orders and road closures in surrounding communities, including parts of Auburn and Clipper Gap. The City of Auburn remained on alert due to the fire's proximity, requiring coordination with county and state agencies. Overall, the incident required a unified multi-jurisdictional response to manage evacuations, public safety, and fire containment.
October 20, 2021	October 20, 2021	Debris Flow	A Flash Flood/Debris Flow Warning has been issued for the River Fire area.	The Placer County Sheriff's Office issued evacuation orders for some areas of Colfax due to potential debris flow near the River Fire burn scar area. The orders include Hill crest Blvd, south from 1565 Hillcrest Blvd to Spring Valley Rd, Spring Valley Rd. from Milk Ranch Road, and Ben Taylor to the Bear River.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 26, 2021	January 10, 2022	Freeze and Snow	The December storms started on December 26, 2021, and lasted two weeks, leaving thousands of Placer County residents without power days. Between PG&E, Liberty Utilities, and Truckee Donner PUD, over 10,000 Placer connections were without power beginning the morning of December 27. The power outages were compounded by widespread down trees, related debris, and snow, causing significant challenges to clear highways and roadways for emergency responders and the public. The storms resulted in record-setting amounts of snow in the foothills and mountain areas of Placer County.	Roads were impassable due to snow accumulation, including Interstate 80, closed from December 26, 2021, to December 28, 2021, due to white-out conditions, heavy snow, and downed trees and power lines. Several highways, including SR-80, SR-89, and SR-267, were closed due to avalanche and downed trees. Foresthill Fire reported that roads in Foresthill, including parts of Foresthill Rd, were inaccessible due to snow. CalFire reported multiple trees down on Hwy 174. County Public Works reported widespread impacts of major roadways and connectors of its service areas in the foothills and mountain areas. These impacts resulted in numerous calls for assistance from local first responder agencies and residents of affected areas.
September 6, 2022	October 22, 2022	Wildfire	The Mosquito Fire ignited near Oxbow Reservoir east of Foresthill, swiftly expanding across Placer and El Dorado counties to become the largest wildfire in California that year, ultimately consuming about 76,788 acres	Almost 6,000 residents were evacuated from communities such as Foresthill and Michigan Bluff in Placer County as the blaze destroyed 78 structures and damaged 13 more.
September 13, 2022	September 19, 2022	Wildfire	The Dutch Fire ignited on September 13, 2022, near Interstate 80 and Ridge Road by Dutch Flat and rapidly grew to approximately 48 acres under dry, windy conditions.	Prompted mandatory evacuations and temporarily closed I-80, though lanes were reopened later that same day as containment progressed
December 26, 2022	January 16, 2023	Heavy Rains and Storms	A series of intense winter storms—aided by atmospheric rivers—began late on December 26, 2022, bringing heavy rain, wind, and significant snowfall to Placer County's foothills and mountain areas. Placer County activated an emergency operations center and proclaimed a local emergency to mobilize resources and coordinate with special districts.	Storms caused widespread power outages affecting thousands of residents, downed trees and powerlines, and triggered road closures, including on I-80, as crews responded to clear snow and debris.
February 26, 2023	March 10, 2023	Freeze and Snow	A powerful winter storm struck on February 26, 2023, bringing heavy snowfall and high winds that closed Interstate 80 for several days and battered the Sierra foothills with dangerous whiteout conditions.	Storms caused Placer County OES to activate its Emergency Operations Center, with snow removal crews working around the clock, and local officials proclaimed a state of emergency and later ratified a local emergency. Heavy snow caused an avalanche in Olympic Valley and a landslide in Colfax, leading to evacuations and property damage, while thousands of customers lost power.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
July 1, 2023	July 9, 2023	Extreme Heat	Placer County experienced an extreme heat event in July 2023, with the most intense period occurring from July 1 through July 9, 2023. During this time, the National Weather Service issued an Excessive Heat Warning for the region, forecasting temperatures reaching up to 115°F in the valley and 109°F in the foothills, with overnight lows in the upper 70s to mid-70s, providing little relief from the heat during the evening hours.	Placer County activated cooling centers to provide residents with a safe and cool environment. These centers were part of a statewide initiative coordinated by the California Governor's Office of Emergency Services to assist Californians during periods of extreme heat.
January 23, 2024	February 10, 2024	Heavy Rains and Storms	Placer County experienced a series of intense winter storms that caused widespread power outages affecting over 55,000 customers and significant infrastructure damage.	The county activated emergency resources, including community centers to support residents without power, especially those with medical needs. Heavy rain and strong winds led to hazardous driving conditions and flooding in some areas. Placer County declared a local emergency on January 23, 2024, to facilitate state and federal assistance for recovery efforts.
February 29, 2024	March 5, 2024	Freeze and Snow	Placer County experienced a series of severe winter storms that brought heavy snowfall, strong winds, and widespread rain to the region.	Conditions led to significant disruptions, including power outages affecting thousands of residents, hazardous driving conditions due to snow accumulation, and the closure of key roads. The storms prompted the activation of emergency services, including snow removal operations and the establishment of community resource centers to assist residents without power.
July 4, 2024	July 8, 2024	Extreme Heat	Placer County endured a significant extreme heat event beginning July 4, 2024, when the National Weather Service issued an Excessive Heat Warning covering the region. Daily highs reached well above 110 °F across the valley and foothills and also raised concerns for wildfire risk, with agencies coordinating red-flag protocols and emergency readiness as temperatures peaked.	Placer County extend library and Animal Services hours as temporary cooling centers to help residents.
July 19, 2024	July 21, 2024	Wildfire	The Leigh Fire ignited on July 19, 2024, at approximately 6:18 PM just south of Ridge Road and Lehi Lane, northwest of Newcastle in Placer County. The blaze burned for two days before CAL FIRE's Nevada-Yuba-Placer Unit reported it was 100% contained by 10:50 AM on July 21, 2024.	Response by fire districts to contain the fire quickly.
October 5, 2024	October 6, 2024	Wildfire	The Dutch Fire ignited on October 5, 2024, near Lowell Hill Road and Dutch Flat Forebay Dam, straddling the Nevada/Placer County line, and burned roughly 28 acres of grass and brush.	Mandatory evacuations and warnings were issued for the Dutch Flat and Culberson Road area before containment efforts halted the fire's forward progress by October 6.

27.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Placer County RCD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 27-10 shows Placer County RCD ‘s final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 27-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

27.7.4 Vulnerability Assessment

Table 27-11 lists issues related to the top hazards of concern for Placer RCD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 27-11. Hazard Issues

Issue	Related Hazards
Significant portions of the District are located in the High or Very High Fire Hazard Severity Zones. Wildfire mitigation in these areas requires frequent, consistent management of fuels to reduce the intensity and severity of wildfires.	Wildfire, Drought and Water Shortage,
Wildfire burn scars can exacerbate floods, debris flows, and invasive species expansion.	Flood, Landslide Mudslide and Debris Flows, Heavy Rains and Storms
Due to Placer County's climate and future climate changes, soil will often dry out without proper management, which exacerbates drought and water shortage impacts.	Drought and Water Shortage

27.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 27-12 describes the potential impacts of the hazards of local concern to Placer County RCD (hazards identified as medium or high risk in Table 27-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 27-12. Hazard Impacts

Hazard	
Landslides, Mudslides, and Debris Flow	Landslides, mudslides, and debris flows can damage roads, utilities, and structures, disrupt transportation routes, and isolate communities. These events often occur in steep terrain or areas impacted by wildfire burn scars, where soil instability is heightened. Impacts include property damage, potential injuries, and increased emergency response needs, particularly in rural or mountainous regions.
Wildfire	Wildfires can cause widespread destruction of homes, infrastructure, and natural resources, leading to property loss, injuries, and significant displacement of residents. Large-scale incidents may require multi-jurisdictional coordination for evacuations, road closures, and fire suppression. Burn scars from previous fires can increase vulnerability to secondary hazards such as flooding, debris flows, and invasive species spread.

27.7.6 Changing Conditions That May Impact Risk

Population and development changes for Placer RCD are consistent with those identified in Chapter 2 County of Placer. Since the previous plan was approved, booming population and development have increased the vulnerability of the District.

27.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

27.8.1 Changes in Community Priorities

The District places a high priority on reducing wildfire risk, restoring landscapes impacted by fire, and improving long-term soil health. Efforts focus on proactive vegetation management to protect lives, property, and critical infrastructure from future wildfire events. Post-fire recovery is essential to stabilize soils, prevent erosion, and reduce the likelihood of secondary hazards such as flooding and debris flows. Additionally, enhancing soil health and promoting carbon sequestration supports ecosystem resilience, improves water retention, and contributes to climate adaptation goals.

27.8.2 Past Mitigation Action Status

Table 27-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 27-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project Name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	Fuel reduction work is subject to specific terrain and environmental conditions and treatments may include removal of trees and vegetation by hand crews, chipping, mastication, grazing, herbicide or prescribed burning.	Fuel Breaks – Wildland Urban Interface (WUI)	Not Complete	Yes	
2	Fuel reduction work is subject to specific terrain and environmental conditions and treatments may include removal of trees and vegetation by hand crews, chipping, mastication, grazing, herbicide or prescribed burning.	Fuel Break – Large Strategic	Not Complete	No	Combine with #1
3	Fuel reduction work is subject to specific terrain and environmental conditions and treatments may include removal of trees and vegetation by hand crews, chipping, mastication, grazing, herbicide or prescribed burning.	Defensible Space Programs (Placer County Chipper Program)	Not Complete	No	Combine with #1

Action Number	Project Description	Project Name	Status	Include in new strategy?	IF NO, explain why no longer relevant
4	Provide technical assistance the private landowners to improve soil health and increase carbon sequestration. The following practices may be implemented depending on site specific assessment and development of conservation/carbon farming plans. ➢ Mulching ➢ Compost application ➢ Residue and Tillage Management, No Till/Strip Till/Direct Seed ➢ Multi-Story Cropping ➢ Windbreak/Shelterbelt Establishment ➢ Forage and Biomass Planting ➢ Crop Rotation ➢ Alley Cropping ➢ Riparian Herbaceous Cover ➢ Range Planting ➢ Critical Area Planting ➢ Tree/Shrub Establishment ➢ Vegetative Barrier ➢ Grassed Waterway ➢ Hedgerow Planting ➢ Conservation Cover ➢ Wetland Restoration ➢ Contour Buffer Strips ➢ Riparian Restoration	Landowner Technical Assistance (Healthy Soils/ Carbon Farm Management Program)	Not Complete	Yes	

27.8.3 Hazards Omitted from Mitigation Strategy

Placer RCD is a very focused agency whose core mission is to provide technical assistance and funding for land stewardship practices. The District does not have the capacity to design an all-hazards mitigation program, nor is it in their mission. The District chose to focus their mitigation strategy on their two primary hazards of concern—wildfires and drought and water shortage—while also including hazards that would directly impact their customers (private landowners) including flood, heavy rains and storms, and landslides, mudslides, and debris flows. All other hazards were omitted from their mitigation strategy.

27.8.4 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Placer RCD would like to pursue in the future to reduce the risk from hazards.

Table 27-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 27-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	-	-	-
Drought and Water Shortage	-	-	X	-
Earthquake	-	-	-	-
Flood	-	-	X	-
Freeze and Snow	-	-	-	-
Heavy Rains and Storms	-	-	X	-
High Winds and Tornadoes	-	-	-	-
Landslides, Mudslides, and Debris Flow	-	-	X	-
Wildfire	-	-	X	-

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 27-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 27-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
PCRCD-01	Wildfire Mitigation and Fuels Management	7	1-5 Years	High	High	7.75	Medium
PCRCD-02	Post-Fire Restoration	4	1-5 Years	High	High	7	Medium
PCRCD-03	Soil Health and Carbon Sequestration	5	1-5 Years	Medium	High	6.25	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

27.8.5 Mitigation Strategy

Table 27-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The Placer RCD Executive Director will lead implementation of all projects listed. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 27-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
PCRCD-01	Wildfire Mitigation and Fuels Management	The District will conduct fuel reduction work in Placer County. Projects may include, but are not limited to, removal of trees and vegetation by hand crews, chipping, mastication, grazing, herbicide or prescribed burning. In progress large projects include the North Fork American River Fuel Break and Shaded Fuel Break, Placer County Chipper Program, and Wildland Urban Interface (WUI) Fuel Breaks.	Wildfire, Drought and Water Shortage,	Placer County Fire Department, CAL FIRE, US Bureau of Reclamation, California State Parks, Todd Valley Consolidated Tribe, Placer Land Trust	Staff Time, CAL FIRE Wildfire Prevention Grants, FEMA Hazard Mitigation Grant Program.
PCRCD-02	Post-Fire Restoration	The District will conduct post-fire restoration work in the Mosquito Fire and other burn scars to prevent floods and debris flows. Projects include, but are not limited to, erosion control, site preparation, hazard tree removal, planting, and weed abatement.	Flood, Landslide Mudslide and Debris Flows, Heavy Rains and Storms	Placer County Office of Emergency Services	US Forest Service Disaster Grant, Staff Time, FEMA Hazard Mitigation Grant Program
PCRCD-03	Soil Health and Carbon Sequestration	The District will provide technical assistance the private landowners to improve soil health and increase carbon sequestration. The following practices may be implemented depending on site specific assessment and development of conservation/carbon farming plans. • Mulching • Compost application • Residue and Tillage Management, No Till/Strip Till/Direct Seed • Multi-Story Cropping • Windbreak/Shelterbelt Establishment • Forage and Biomass Planting • Crop Rotation • Alley Cropping • Riparian Herbaceous Cover • Range Planting • Critical Area Planting • Tree/Shrub Establishment • Vegetative Barrier • Grassed Waterway • Hedgerow Planting • Conservation Cover • Wetland Restoration • Contour Buffer Strips • Riparian Restoration	Drought and Water Shortage	Placer Land Trust	Staff Time, Governor's Office of Land Use and Climate Innovation Climate Adaptation Grants

28. Placer County Water Agency Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Placer County Water Agency (PCWA) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of PCWA, describes who participated in the planning process, assesses PCWA ‘s risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Agencywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to PCWA as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

28.1 Hazard Mitigation Planning Team

PCWA identified MJHMP points of contact and developed this annex over the course of several months. The following Agency staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Todd Deacon, Procurement and Risk Manager

Address: 144 Ferguson Road, Auburn, CA 95604

Phone Number: 530-823-4850

Email: tdeacon@pcwa.net

Alternate Point of Contact: Laura Rodarte, Strategic Affairs Manager

Address: 144 Ferguson Road, Auburn, CA 95604

Phone Number: 530-823-4850

Email: lrodarte@pcwa.net

Agency personnel represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. Agency personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 28-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 28-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Andy Fecko	Office of General Manager	General Manager	MS Teams Access Documents & Collaboration
Dan Kelly	Office of General Manager	General Counsel	MS Teams Access Documents & Collaboration
Jeremy Shepard	Technical Services	Director of Technical Services	MS Teams Access Documents & Collaboration
Aaron Sullivan	Power System	Director of Power Generation Services	MS Teams Access Documents & Collaboration
Tony Firenzi	Strategic Affairs	Director of Strategic Affairs	MS Teams Access Documents & Collaboration
Carrie Parks	Financial Services	Director of Financial Services	MS Teams Access Documents & Collaboration
Daryl Hensler	Field Services	Director of Field Services	MS Teams Access Documents & Collaboration
Matt Young	Customer Services	Director of Customer Services	MS Teams Access Documents & Collaboration
Darin Reintjes	Resource Management	Director of Resource Management	MS Teams Access Documents & Collaboration
Nicole Skarda	Administrative Services	Director of Administrative Services	MS Teams Access Documents & Collaboration
Shane Motley	Energy Marketing	Director of Energy Marketing	MS Teams Access Documents & Collaboration
David Russell	Information Technologies	Director of IT	MS Teams Access Documents & Collaboration
Pete Cannarozzi	Power System	Deputy Director of Power Generation Services	MS Teams Access Documents & Collaboration
Kyle Dushane	Power System	Deputy Director of Power Generation Services	MS Teams Access Documents & Collaboration
Lance Hartung	Field Services	Deputy Director of Field Services	MS Teams Access Documents & Collaboration
Linda Higgins	Customer Services	Deputy Director of Customer Services	MS Teams Access Documents & Collaboration
Laura Rodarte	Strategic Affairs	Strategic Affairs Manager	Internal/External Liaison MS Teams Access Documents & Collaboration
Brian Rickards	Technical Services	Planning and Development Services Manager	MS Teams Access Documents & Collaboration
Heather Knutson	Technical Services	Engineering Services Manager	MS Teams Access Documents & Collaboration
Todd Deacon	Financial Services	Procurement and Risk Manager	Internal/External Liaison MS Teams Access Documents & Collaboration

Name	Department	Position	MJHMP Contribution
Kayla Loken	Technical Services	Safety Manager	MS Teams Access Documents & Collaboration
Kimberly Mauch	Technical Services	GIS Supervisor	MS Teams Access Documents & Collaboration
Sean Lomen	Information Technology	Physical Security Technician	MS Teams Access Documents & Collaboration

28.2 Community Profile

PCWA was established in 1957 through an Act of the California State Legislature to serve as the primary water resource agency for Placer County. Its jurisdiction spans the entire county and is governed by an elected five-member Board of Directors.

PCWA was formed with the mission to preserve Placer County's water resources for future generations and protect local benefits from being diverted elsewhere, a common practice at the time as major cities and state agencies constructed reservoirs and aqueducts to transport water across California.

Today, PCWA manages a broad range of responsibilities, including water resource planning, retail and wholesale delivery of drinking and irrigation water, and hydroelectric energy production. The development of the Middle Fork American River Project stands as a cornerstone of PCWA's efforts to secure and manage water and energy resources for the region, ensuring sustainable use and long-term resilience (PCWA 2025).

28.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the PCWA completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the Agency serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

28.3.1 Outreach Activities

PCWA conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

In the summer of 2025, PCWA featured MJHMP information in their quarterly newsletter to customers. In addition, PCWA posted MJHMP information on social media. Outreach efforts are shown in **Error! Reference source not found.** and **Error! Reference source not found.**.

Figure 28-1. PCWA Magazine

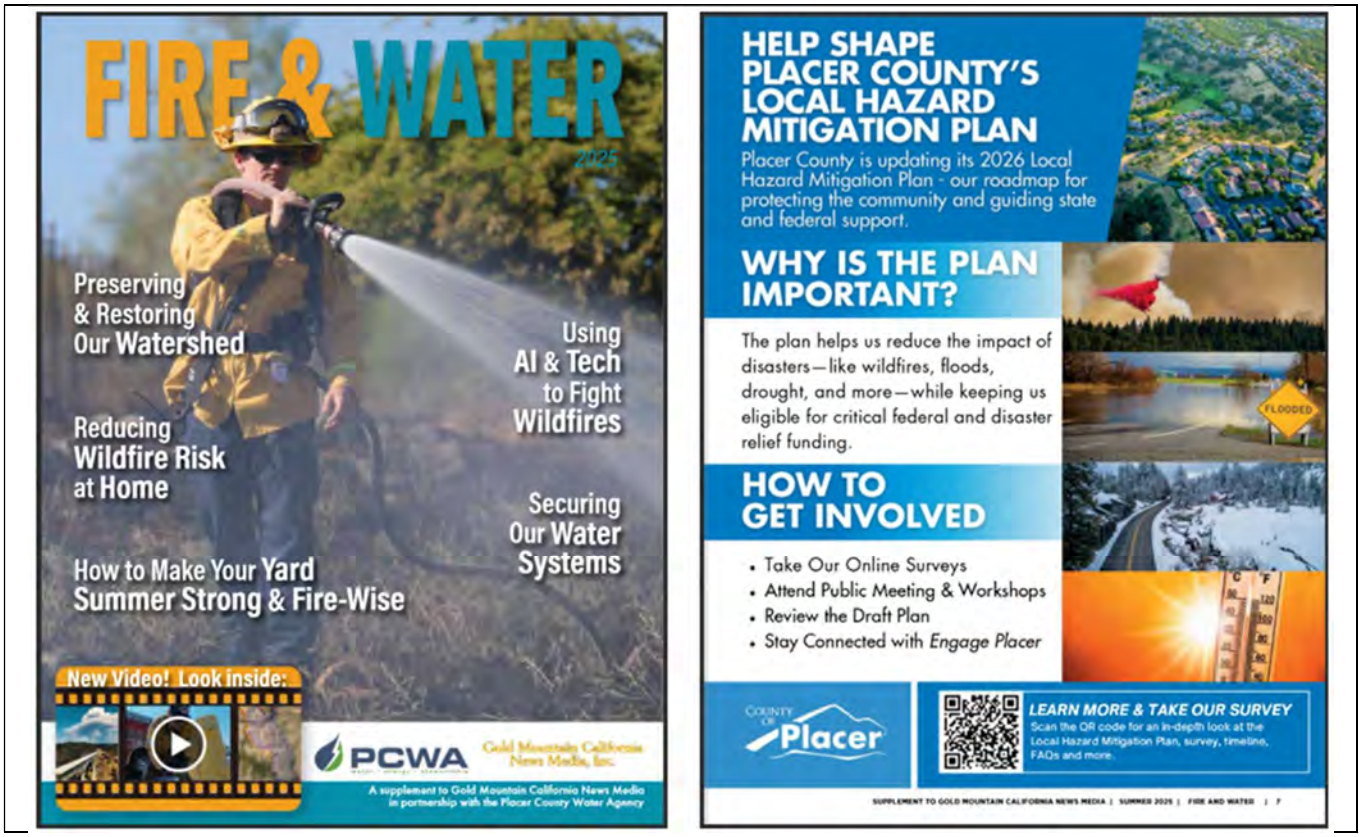
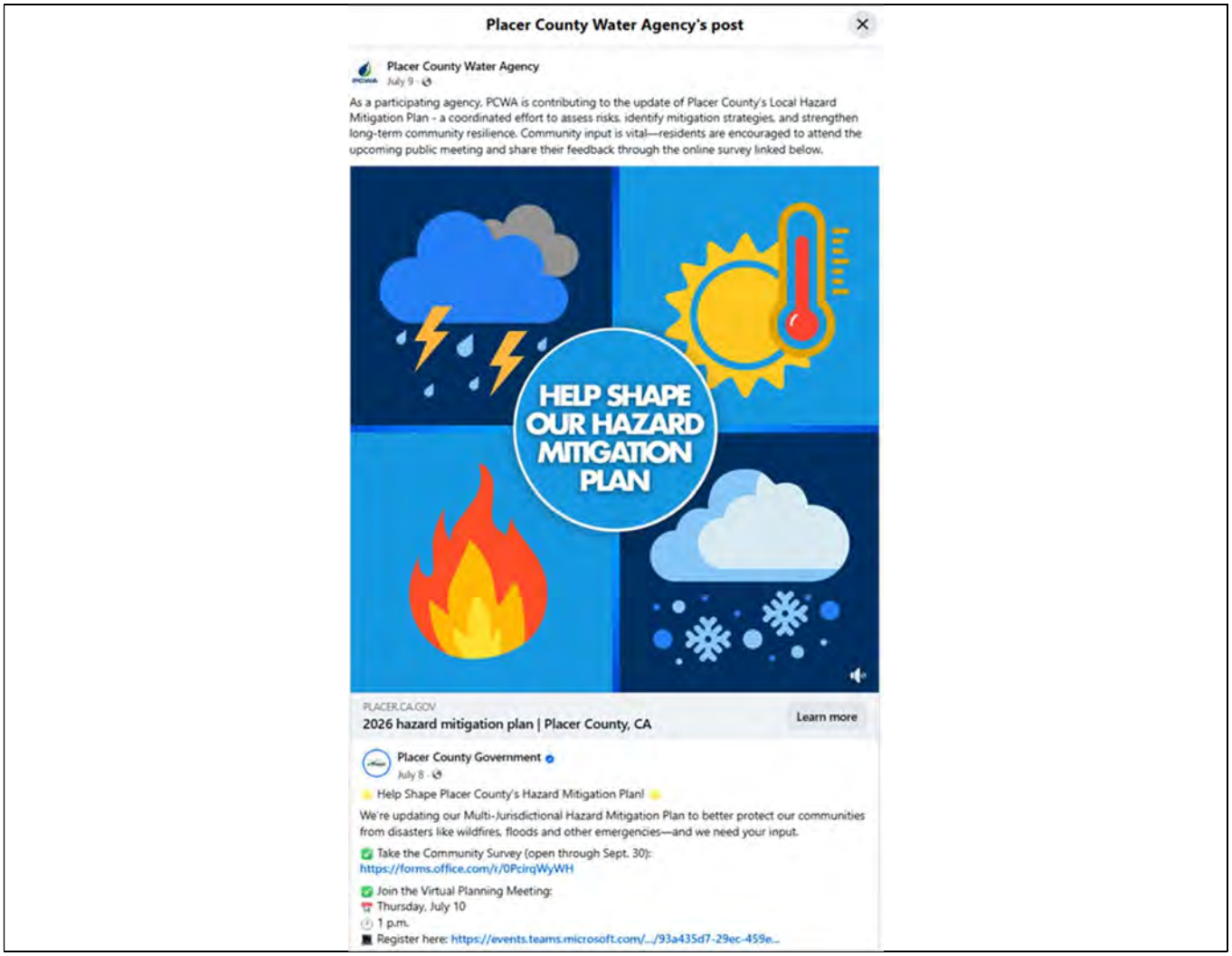


Figure 28-2. Virtual Public Outreach Activities



As part of the planning process, outreach was directed toward underserved and vulnerable populations. Heather Glen Community Services District, a severely disadvantaged community in Placer County, has faced challenges maintaining state compliance with water quality standards. To address these issues, PCWA works closely with Heather Glen CSD to explore potential water system consolidation. The two agencies meet quarterly, and future agendas will include discussion of the 2026 MJHMP update to ensure feedback and participation from this community. Heather Glen CSD is also a participating jurisdiction for this MJHMP, see the jurisdictional annex for Heather Glen CSD.

28.3.2 Public Feedback Integration

Public input was collected through community surveys, public meetings, and social media. This feedback was analyzed to identify hazards of greatest concern to residents, including wildfire, drought and water shortage, and heavy rains and storms. These insights were used to adjust hazard rankings in the plan, ensuring prioritization reflected both technical data and the lived experiences of the community.

Community members also highlighted vulnerabilities such as aging infrastructure, limited emergency access, and the needs of at-risk populations, providing valuable insight into local conditions and perceived risks. PCWA's action items were designed around jurisdictional capabilities to address these hazards where possible.

During outreach, residents emphasized the importance of protecting critical infrastructure and community lifelines, reducing damage to utilities, and promoting cooperation among government agencies, residents, non-profit organizations, and local businesses.

These insights were used to adjust the hazard rankings in the plan, ensuring that the final rankings reflected not only technical data but also the lived experiences and concerns of the community.

28.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Agency invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

28.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- CAL FIRE
- Placer County Environmental Health
- Placer County Office of Emergency Services
- Placer County Resource Conservation District
- Placer County Sheriff's Office

28.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- California Department of Water Resources
- Placer County Community Development Resource Agency
- US Army Corps of Engineers

28.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the Agency.

- City of Auburn
- City of Colfax
- City of Lincoln
- City of Roseville
- City of Rocklin
- Town of Loomis
- Nevada Irrigation District
- San Juan Water District

28.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the Agency.

- Auburn Chamber of Commerce
- Building Industrial Association
- Rocklin Chamber of Commerce
- Roseville Chamber of Commerce
- Western Placer Unified School District

28.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the Agency.

- American River Conservancy
- The Nature Conservancy

28.5 Jurisdictional Capability Assessment

PCWA performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities

- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for PCWA to identify opportunities for integrating mitigation concepts into ongoing Agency procedures.

As a special district, PCWA lacks some of the regulatory capabilities that are available to municipalities. Specifically, the Agency has no authority over building codes, land use, development, or permitting. Construction and development in the Agency are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The Agency also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

28.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 28-2 summarizes the ordinances currently in place in the Agency. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 28-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The Agency does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The Agency does not have the authority to expand or improve state codes.	Placer County Building Department
Site Review Code	Agency reviews site plans for "water availability".	N/A	N/A
Agency Rules and Regulations **2025**	Agency rules, regulations, rates and charges governing the distribution and use of water.	N/A - Rules and Regulations may be changed, however this is meant for use of water, not hazard mitigation.	Agency Board of Directors
CA Water Code **2024**	Governs use, protection and management of California's water resources including general state powers over water, foundational laws related to water, conservation, development and utilization, water quality, and creation, powers, and financial provisions from water providers.	N/A - No authority to expand or improve	California State Water Resources Control Board (SWRCB)

28.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 28-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities. These documents incorporate water supply and flood mitigation priorities, although they are not explicitly integrated with the MJHMP. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table below will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

Table 28-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
County-Wide Master Plan – Financial Assistance Program ongoing	Loans or grants provided to districts for conservation and development of eligible water supplies and facilities.	Plan focuses on unserved areas, infrastructure reliability, water supply reliability, renewable energy development, watershed stewardship, agriculture, conservation, and public education and outreach. Includes hazard mitigation.	Financial Services Department
Capital Improvement Plan or Program 2026	Five-year Capital Improvement Plan that is updated on an annual basis. This plan has and will continue to fund capital improvements related to hazard mitigation efforts when possible.	Agency manages this plan internally balancing capital needs and hazard mitigation efforts.	Financial Services Department
Urban Water Management Plan 2021	The Urban Water Management Plan (UWMP) unifies planning for California watersheds into watershed area plans, considering the entire watershed and the more geographically far-reaching impacts of water.	No authority to expand or improve	California Department of Water Resources
Emergency Action Plan 2024-2025	Agency has multiple Emergency Action Plans ranging from treated and untreated water emergencies to dam failures.	The Agency has the ability to expand and improve the plans.	Placer County Water Agency, US Environmental Protection Agency, Federal Energy Regulatory Commission
Continuity of Operations Plan 2024-2025	America's Water Infrastructure Act and Federal Energy Regulatory Commission Emergency Action Plans address continuity of operations.	The Agency has the ability to expand and improve the plans.	US Environmental Protection Agency, Federal Energy Regulatory Commission

28.5.3 Development and Permitting Capability

PCWA is a special district located in Placer County. The Agency is subject to the Placer County and State of California building codes and land use regulations. The Agency does not permit or regulate development. Development permits within the Agency's jurisdiction are issued through Placer County.

28.5.4 Administrative Capability

Table 28-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the Agency.

Table 28-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Planning Department	Planning is a collaborative effort between Agency engineers and water and power operations.
Mitigation Planning Committee	Mitigation efforts are taken into consideration in the planning phase of capital improvement projects and O&M efforts.
Public Works/Highway Department	Agency engineers are responsible for capital improvements including design of project, review, and project management.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Agency has fully staffed water and power operations that handle O&M of the water system and power system. Vegetation management and tree trimming services are conducted by internal staff and with various contractors as needed.
Mutual aid agreements	Agency participates in the California Utilities Emergency Association Mutual Assistance and has mutual aid agreements with other local entities.

28.5.5 Technical Capability

Table 28-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the Agency.

Table 28-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Engineers or professionals trained in building or infrastructure construction practices	Technical Services Department and Power Systems Department engineers are responsible for capital improvements including design of project, review, and project management.
Staff with expertise or training in benefit/cost analysis	Both the Financial Services Department and Engineers have experience with benefit/cost analysis.
Environmental scientist familiar with natural hazards	Two staff perform environmental work and CEQA for capital improvements.
Emergency Manager	PCWA uses an incident command structure. Agency managers involved in operations have completed ICS training. Agency has a Risk Manager, Safety Manager and Dam Safety Officer. Table-top exercises are performed as needed.
Grant Managers and/or Writer(s)	The Financial Services Department administers a Financial Aid Program that provides grants to other local agencies for projects that meet certain criteria. The Strategic Affairs Manager identifies, tracks and manages grant applications and submission to funding agencies.
GIS Coordinator/Analyst	The Agency has three GIS specialists on staff

28.5.6 Fiscal Capabilities

Table 28-6 summarizes financial resources available to PCWA.

Table 28-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Budget is available for hazard mitigation projects supporting the water system or hydroelectric generation facilities.
User fees for water, sewer, gas, or electric service	Used for water system
Incur debt through general obligation bonds	Not specifically for hazard mitigation but it could be a component
Other federal or state Funding Programs	Used for prevention, hardening, or replacing infrastructure
Insurance	Used for replacement and stabilization of existing hazard conditions after loss

28.5.7 Education and Outreach Capability

Table 28-7 summarizes the education and outreach resources available to PCWA.

Table 28-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	3 staff devoted to communications in the Public Affairs Division of the Customer Services Department.
Personnel skilled or trained in website development	IT department works in coordination with Public Affairs to push information out regarding hazards or disasters.
Hazard mitigation information available on your website	Fire & Water Publication, Dam Safety Flyer.
Social media for hazard mitigation education and outreach	Social media platforms include Facebook, X, Nextdoor, Instagram, LinkedIn, and YouTube.
Community newsletter	Bi-Monthly newsletters are mailed with bills, emailed in e-news, and posted on social media and website.
Local news	The Agency can work with local news outlets as needed.
Citizen boards or commissions that address issues related to hazard mitigation	Participates in joint public message boards warning about water levels rising at the confluence of the north and middle forks of the American River.
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	Agency has a booth at Placer County's Fire Expo. Also participates in community meeting to address hazards as needed.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens about natural hazards, risk, and ways to protect themselves during such events?	As a water agency, the Agency does not typically communicate information to the public regarding natural hazards other than drought in which case water conservation information is communicated through various channels. The Agency also participates in various publications related to water efficiency, conservation and hazards such as wildfire.
Sierra-French Meadows Forest Restoration Partnership	The Sierra-French Meadows Forest Restoration Partnership Includes PCWA, Placer County, The U.S. Forest Service, the Nature Conservancy, The Sierra Nevada Conservancy, The American River Conservancy and UC Merced SNRI all working together to make the forest healthy and more resilient.

Outreach Resources	Description, Expansion, Improvement
Mountain Counties Water Resource Association	The Mountain Counties Water Resource Association seeks to educate state, local and federal decision-makers on the issues facing water agencies in the region. These issues include long-term sustainability through many of the hazards within this plan.
Regional Water Authority	The RWA is a joint powers authority, formed to serve and represent regional water supply interests and to assist its members in protecting and enhancing the reliability, availability, and quality of water resources. A part of the mission is to address the impact of climate change on water supplies and kickstart the Sacramento Regional Water Bank for sustainable water storage and recovery. The Authority is comprised of both public and private partners. PCWA is a member and supporter of RWA.
Water Education Foundation	The Water Education Foundation is an impartial non-profit organization which develops and implements education programs leading to a broader understanding of water issues and to the resolution of water problems.
Department of Water Resources	DWR's mission is to manage the water resources in California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environment. PCWA coordinates with DWR on groundwater monitoring in west Placer County, interstate water resource negotiations regarding the Truckee River system, and on other regional issues.
Water Forum	The Water Forum was a collaborative process of a diverse group of business and agricultural leaders, citizens groups, environmental interests, water managers and local governments in Sacramento County, Placer County, and El Dorado County, with the co-equal objectives to (a) provide a reliable and safe water supply for the region's economic health and planned development to the year 2030, and (b) preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River. Implementation of the Water Forum Agreement will continue under the WF Successor Effort for many years.
Protect American River Canyons	PARC is a community-based non-profit organization located in Auburn that is dedicated to building American River community through collaboration and protection of the natural, recreational and historical resources for the North and Middle Forks of the American River Watershed.
CAL FIRE	Is a major incident management responder, providing varied emergency services. CAL FIRE has both State and Local responsibilities and is a primary responder to wildland fire in the Placer/El Dorado Area. PCWA has a working relationship with Cal-Fire that includes water and the sharing of other Agency resources.
United States Forest Service	Is a Federal Agency under the US Department of Agriculture responsible for administering National Forests and Grass Lands which include the Tahoe and El Dorado Forest. PCWA enjoys a strong relationship working alongside the Forest Service as facilities and watersheds are intermingled.
United States Bureau of Reclamation	A Federal Agency under the US Department of the Interior which oversees water resource management specifically as it applies to the oversight and operation of diversion, delivery and storage and hydroelectric projects. The USBR still has an interest in the American River at the former site of the Auburn Dam.
State Department of Parks & Recreation	Auburn State Recreation Area – The Auburn State Recreation Area is a part of the California Department of Parks and Recreation. They are responsible for the conservation and management of approximately 20-miles of park along the confluence of the American River.
Pacific Gas & Electric Company	PG&E in a utility company delivering energy services to Northern and Central California. PG&E has multiple land, operational and watershed connections with PCWA.
Water Utilities in the Region	PCWA works in partnership with other water utilities in the region such as City of Roseville, San Juan Water District, and Nevada Irrigation District.

28.5.8 Community Classifications

PCWA does not currently maintain formal classifications for community programs.

28.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 28-8 summarizes the adaptive capacity for each identified hazard of concern and the Agency's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 28-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Moderate
Drought and Water Shortage	Strong
Earthquake	Weak
Flood	Moderate
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Moderate
High Winds and Tornadoes	Weak
Wildfire	Moderate

28.6 National Flood Insurance Program

PCWA is a special district for Placer County. The Agency does not participate in the NFIP directly. Therefore, all structures located within the Agency's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

28.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of PCWA's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

28.7.1 Hazard Area

The probable hazard areas within the Agency are shown in Figure 28-3 and Figure 28-4. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which PCWA has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 28-3. Flood Hazard Area

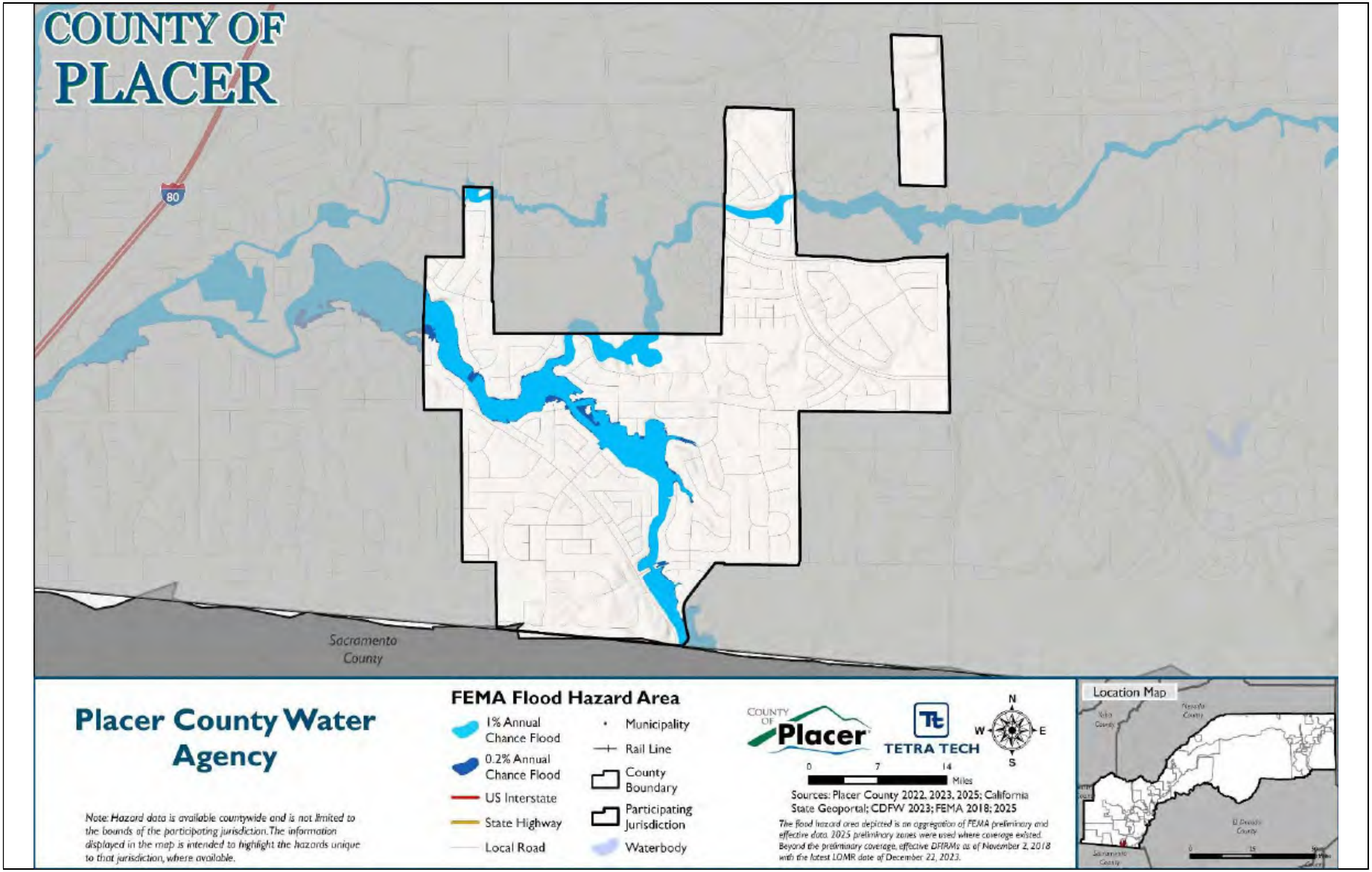
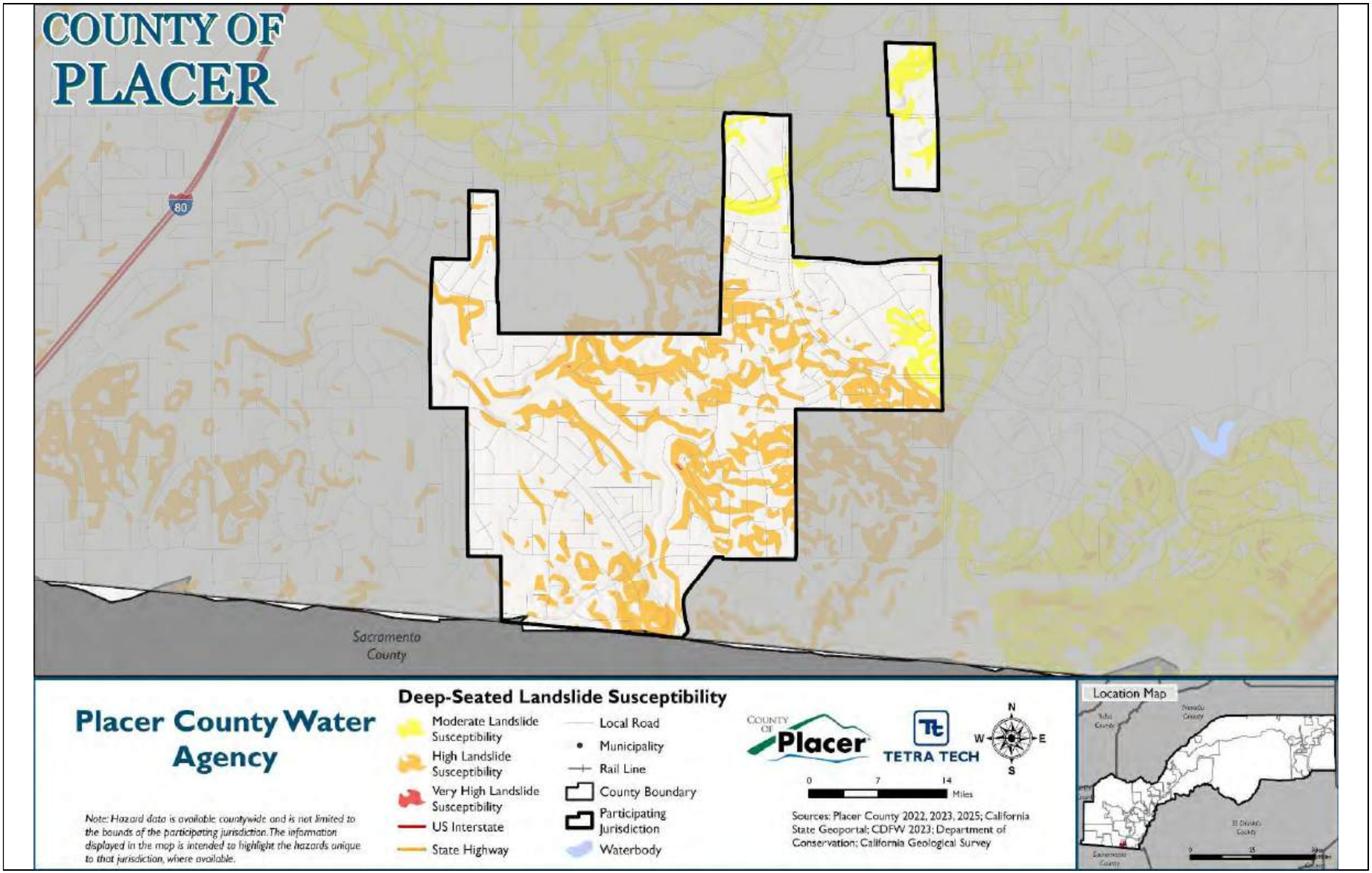


Figure 28-4. Landslide Hazard Area



28.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 28-9 provides details on loss and damage in PCWA during hazard events since the last hazard mitigation plan update.

Table 28-9. Hazard Event History in PCWA, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 21, 2021	December 28, 2021	Strong Wind	Several high impact winter storms impacted the region around the Christmas holiday. Widespread precipitation, low snow levels of 500 to 2500 feet, and strong and damaging winds resulted. Impacts ranged from fallen trees, downed power and phone lines, with widespread and extended outages, treacherous driving conditions including chain controls and extended highway closures due to wind and/or snow, multiple accidents and spin outs due to snow, damaged property due to snow and wind. Governor Gavin Newsom declared a state of emergency in 20 California counties due to the impacts from the series of storms. The affected areas include: El Dorado, Nevada, Placer, Sacramento and Yuba counties, but also Los Angeles and parts of the Bay Area. As of 12/29 1300 hours, Cal-OES estimated that the late December storm damages to roadway infrastructure total $22.2 million. Warming centers were also opened across the region for those impacted by the stormy weather	Water System: Various fallen trees in, over, and around raw water canal infrastructure and access roads. Vegetative debris build up in canals clogging trash racks and screens. Required increased storm patrols throughout the water system to avoid overflows.
September 7, 2022	September 9, 2022	Wildfire	The Mosquito Fire began in Placer County 4 miles east of Foresthill near Mosquito Ridge Road, CA, and close to Oxbow Reservoir the evening of September 6, 2022, at 6:27 PM PDT and later spread into El Dorado County. Extreme fire behavior was observed due to the very dry humidity and fuels, with the fire developing large plumes that radar indicated extended up to 40,000 feet. In the first few days, the fire saw rapid growth at 5,705 acres by 7 pm PDT on the 7th and 13,705 acres by 8 pm PDT on the 8th. More than 11,000 people were evacuated and 9,000 structures were threatened. The fire included areas in both the Tahoe and Eldorado National Forests. The fire burned a total of 76,788 acres and caused road closures throughout the area. There were 2 firefighters injured during the fire. A total of 78 structures were destroyed and an additional 13 buildings were damaged in the towns of Foresthill, Volcanoville, and Michigan Bar. Periods of moderate to heavy rain from September 18-21 largely halted fire growth, but the fire was not considered fully contained until October 22.	Power System: PCWA hydroelectric facilities were significantly impacted by the Mosquito Fire. PCWA suffered physical damages and lost revenue as a result.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Water System: Various fallen trees in, over, and around raw water canal infrastructure and access roads. Vegetative debris build up in canals clogging trash racks and screens. Required increased storm patrols throughout the water system to avoid overflows. Power System: Heavy rains within the Mosquito Fire burn scar caused significant erosion along Mosquito Ridge Rd causing road to begin to fail. In addition, debris from the steep canyon slopes from the burn scar was washed down in the river significantly impacting dam facilities with sediment.
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	Water System: Various fallen trees in, over, and around raw water canal infrastructure and access roads. Vegetative debris build up in canals clogging trash racks and screens. Required increased storm patrols throughout the water system to avoid overflows. Power System: Heavy rains within the Mosquito Fire burn scar caused significant erosion along Mosquito Ridge Rd causing road to begin to fail. In addition, debris from the steep canyon slopes from the burn scar was washed down in the river significantly impacting dam facilities with sediment.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	Water System: Various fallen trees in, over, and around raw water canal infrastructure and access roads. Vegetative debris build up in canals clogging trash racks and screens. Required increased storm patrols throughout the water system to avoid overflows. Power System: Heavy rains within the Mosquito Fire burn scar caused significant erosion along Mosquito Ridge Rd causing road to begin to fail. In addition, debris from the steep canyon slopes from the burn scar was washed down in the river significantly impacting dam facilities with sediment.
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	Water System: Impacted raw water canals causing canals to fill with vegetative debris and snow. This caused blockages at trash racks and screens as well as canals icing over. Various fallen trees around, over, and within canal infrastructure and access roads. Required increased storm patrols throughout the water system to avoid overflows.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
March 1, 2023	Ongoing	Dam / Hydropower Infrastructure Failure	Operational issues at the Lake Spaulding powerhouse resulted in reduced or suspended hydropower generation and constrained water conveyance through the Drum-Spaulding hydroelectric system. The outage limited PG&E's ability to route water through the powerhouse, affecting downstream releases, operational flexibility, and coordination with regional water and energy systems. Repairs and system evaluations have extended over multiple seasons, coinciding with periods of both drought recovery and high runoff.	Operational limitations associated with the Lake Spaulding powerhouse and related conveyance facilities reduced system flexibility during portions of the outage period. These conditions affected PCWA's and Nevada Irrigation District's (NID's) ability to fully optimize water routing and delivery timing within the Drum-Spaulding system. While water supplies continued to be managed to meet multiple objectives, the reduced operational redundancy contributed to more constrained water delivery operations for some Placer County users, including agricultural customers, particularly during periods of high demand and dry-year conditions.
March 4, 2023	March 7, 2023	Winter Weather	A powerful, cold storm system with heavy snow and gusty winds sometimes brought dangerous driving with whiteout conditions. Snow amounts of 3 to 5 feet were reported in the mountains. Heavy snow fell down into the foothills impacting travel. Numerous schools were closed or had delays due to the snow. Gusty winds of 40-50 mph were recorded across the area, with gusts locally higher in the high elevations of the northern Sierra. The winds and low snow combined to cause dangerous travel conditions with an extended closure of Interstate 80. Accumulating snow fell into the Motherlode foothills. CoCoRaHS snowfall reports included 3.0 inches at Grass Valley 2.7 SW, and 2.5 inches at Sonora 3.4E, 3.5 inches at Volcano 3.2N and 5.8 inches of snow at Camino 1.2 N. Schools and businesses were reported closed. Numerous power outages were reported, including continued outages from previous storms. Several storage units collapsed in Grass Valley due to heavy snow load. No injuries reported.	Water System: Impacted raw water canals causing canals to fill with vegetative debris and snow. This caused blockages at trash racks and screens as well as canals icing over. Various fallen trees around, over, and within canal infrastructure and access roads. Required increased storm patrols throughout the water system to avoid overflows.
January 31, 2024	January 31, 2024	Strong Wind	An active weather pattern brought gusty winds with downed trees, heavy rain and mountain snow with mountain travel delays and chain restrictions, and isolated thunderstorms to end the month of January, and continued into early February. California Highway Patrol reported multiple large branches down on eastbound Interstate-80. They also reported a tree down, blocking the road at Courtland Road and Morse Road. Auburn Municipal Airport reported a max gust of 41 mph.	Water System: Impacted raw water canals filling with debris, fallen trees, branches, clogging various trash racks/screens causing blockages throughout the system. Required increased storm patrols throughout the water system to avoid overflows.

28.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

PCWA reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Agency indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- Hazard rankings changed from Low to High: Drought and water shortage; Landslides, mudslides, and debris flow.
- Hazard rankings changed from Low to Medium: Earthquake; Heavy rains and storms.

Table 28-10 shows PCWA ‘s final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the Agency; hazards with a low ranking are not considered to be hazards of local concern for the Agency. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 28-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	High
Earthquake	Medium
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Medium
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	High
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

28.7.4 Vulnerability Assessment

Table 28-11 lists issues related to the top hazards of concern for PCWA. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the Agency, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 28-11. Hazard Issues

Issue	Related Hazard
The American River Watershed provides drinking water supply for more than 140,000 residents in Placer County and is at risk from wildfires, which would contaminate the drinking water supply.	Wildfire
Until the completion of the Placer County Drought Resilience Plan, there is not a prioritized, countywide strategy for drought resilience. Upon completion of the plan, PCWA will seek funding to implement projects in the plan.	Drought and Water Shortage
Existing water infrastructure is not hardened against extreme temperatures and water delivery can be delayed when canal waters freeze.	Drought and Water Shortage, Freeze and Snow
Some existing PCWA infrastructure is made out of wood, making it vulnerable to wildfires.	Wildfire
The existing water delivery system is reliant upon electricity. Historically, power outages cause interruption in water supply.	Drought and Water Shortage; Wildfire
There are 19,500 of forested lands in the Long Canyon Creek watershed that need restoration after the Mosquito Fire to prevent future wildfires and water supply contamination.	Drought and Water Shortage; Wildfire; High Winds and Tornadoes
Sediment from wildfires has settled in PCWA reservoirs and streams, limiting water storage capacity and conveyance.	Drought and Water Shortage; Wildfire; Heavy Rains and Storms; Flood
This project would identify locations for slope stabilization projects along key roadways to access PCWA facilities.	Landslides Mudslides and Debris Flows; Earthquake; Heavy Rains and Storms
There are 19 small and underfunded community water systems in Placer County that struggle to meet demands during times of drought and are hard-pressed to maintain compliance with California's intense regulatory environment.	Drought and Water Shortage
Annual spring runoff is not captured and stored efficiently by existing infrastructure at the Hell Hole Reservoir.	Drought and Water Shortage; Wildfire
Changing precipitation patterns are expected to result in fewer but more intense episodes of heavy rainfall. Existing PCWA infrastructure is not set up to capture increased precipitation over a short period of time.	Heavy Rains and Storms, Dam Failure

28.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 28-12 describes the potential impacts of the hazards of local concern to PCWA (hazards identified as medium or high risk in Table 28-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on Agency-owned assets.

Table 28-12. Hazard Impacts

Hazard	Potential Impacts
Drought and Water Shortage	Extended drought conditions can significantly reduce water availability, impacting raw water delivery and storage capacity. Reduced flows may strain infrastructure and require operational adjustments to maintain service reliability.
Earthquake	Seismic activity could damage aging infrastructure, including canals, flumes, and pump stations, disrupting water delivery and power generation systems. Structural failures may require extensive repairs and emergency response measures.
Heavy Rains and Storms	Intense storms can cause fallen trees and vegetative debris to obstruct raw water canals and access roads, clog trash racks and screens, and increase the risk of overflows. Burn scar areas are particularly vulnerable to erosion and sedimentation, which can impair dam facilities and road stability.
Landslides, Mudslides, and Debris Flow	Slope failures and debris flows can block water conveyance systems, damage access roads, and compromise critical infrastructure. Post-fire landscapes increase the likelihood of severe erosion and sediment buildup, requiring mitigation and cleanup efforts.
Wildfire	Wildfires pose a major threat to both water and power systems. Recent events have caused significant physical damage to hydroelectric facilities and resulted in revenue loss. Burn scars also create long-term vulnerabilities, including erosion and sedimentation during subsequent storms.

28.7.6 Changing Conditions That May Impact Risk

Population and development changes for PCWA are consistent with those identified in Chapter 2 County of Placer. Since the previous plan was approved, booming population and development have increased the vulnerability of the District.

28.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

28.8.1 Changes in Community Priorities

PCWA has emphasized the importance of strengthening resilience against natural hazards and climate-related risks. Key priorities include improving forest health and reducing wildfire risk in wildland-urban interface areas, enhancing water reliability and drought preparedness, and protecting watersheds to maintain long-term water quality and supply. Infrastructure modernization is also a critical focus, with efforts aimed at replacing aging components, automating systems, and ensuring operational continuity through backup power solutions. Additionally, projects address slope stabilization and debris mitigation to reduce landslide hazards, while dam safety and climate adaptation measures are prioritized to safeguard critical water storage facilities. Collectively, these initiatives reflect a commitment to protecting essential resources, reducing vulnerabilities, and promoting sustainable, cooperative solutions for community safety and resilience.

28.8.2 Past Mitigation Action Status

Table 28-13 indicates progress on the Agency's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 28-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	The project will install operable gates on the currently fixed spillway at Hell Hole Reservoir. Being able to keep the gates lowered during winter will preserve the current mode of safe reservoir operation during winter. Raising the gates in spring will allow capture of spring runoff that would otherwise escape over the spillway.	Develop Operable Dam Spillway Gates at Hell Hole Reservoir	Not Complete	Yes	
2	This project will install a structure and piping to allow for the raw water inflow to the treatment plant to come from Towle Canal, near the point where the canal enters Alta forebay. In the event of a fuel, or other contamination in the Towle canal, raw water supply can be restored to the treatment plant after the water in Towle canal has been deemed safe, a much shorter time period than waiting for the contamination to be removed from Alta forebay.	Alternate Intake for Alta Water Treatment Plant	Not Complete	No	Not feasible at this time
3	This project will cooperate with local fire agencies and Cal-Fire to determine locations where canal crossings are desired, and locations that are suitable as a water source for fire suppression equipment.	Canal Access for Fire Fighting and water source	Not Complete	No	Not feasible at this time
4	Project will identify the critical PCWA facilities that do not have stand by power generation and determine the best solution to provide power during any power interruptions.	Back-up and Stand-By Power Generation for critical community drinking and fire suppression water supply.	Complete	No	Project completed
5	The Boardman canal travers the hillside approximately 40 feet above and 100 feet away from Lake Arthur. The installation of one of more pumps will provide access to more than 80 acre feet of water into the Boardman canal, hence the Auburn, Foothill and Sunset water treatment plants.	Lake Arthur Pumping Station	Not Complete	No	Not feasible, no real hazard mitigated

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
6	This project will automate the Monte Vista Spill to regulate the flows into the spill and into the Gold Run Pipe. The project will also encase the Cedar Creek canal between Monte Vista Spill and the head of the Gold Run Pipe, approximately 1,900 feet. A detailed description of the project can be found in the 2019 FEMA pre-disaster mitigation grant application.	Monte Vista Spill Improvements and Cedar Creek Canal Encasement in Pipe	Not Complete	No	Project folded into the PCWA-03 Canal Automation and Encasement and Lining Project.
7	This project would eliminate the north section of the Pulp Mill canal by connecting a new pipeline to the existing pipeline on the south side of interstate 80, continue west along Casa Loma Road, turn north at the Interstate 80 underpass for Alta Bonneynook Road, and continue to Lake Alta.	Pulp Mill Canal Pipeline Encasement	Not Complete	No	New project will be introduced to replace this project that encompasses 50 I-80 crossings rather than one.
8	Project would install three to four pumps of varying capacity or variable speed, into a deep section of Rock Creek Reservoir, pumping water into the PCWA Middle Fiddler Green Canal, providing a water supply to NID and PCWA canals and potentially to the PCWA Foothill and Sunset water treatment plants. A fish exclusion screen would also be installed at the suction of each pump.	Permanent Pumps in Rock Creek Reservoir (PG&E Reservoir)	Not Complete	No	Project folded into PCWA-02 Placer County Drought Resilience Plan.
9	This project would significantly reduce the amount vegetation within 200 feet of the flume, then remove less vegetation an additional 300 feet to either side of the flume and 1,000 feet up and downstream of the flume, along the alignment of the canal. There are 17 timber frame flumes for this project. A project description available upon request.	Vegetation Management at PCWA Wooden Flumes	Not Complete	No	Mitigation grants have not been available for this type of work. The initial vegetation management work is complete but ongoing maintenance is needed.
10	PCWA has an on-going capital improvement fund for lining canals, but there are more than 177 miles of canal with most originating in the 1800s. The Agency funds $1-million a year to gunite a little less than two miles a year.	Enhance Canals by Converting Earthen Canals to Gunite-Lined Canals in Critical Areas.	Not Complete	No	Project folded into the PCWA-03 Canal Automation and Encasement and Lining Project.
11	There are multiple concepts that can potentially be developed for fire prevention or fire suppression support including: transformer-yard fire barriers or extinguishment, additional locations for fire cameras, water access enhancements, wildfire or emergency evacuation-areas, equipment staging areas, public emergency communications enhancements and aviation and rescue enhancements. (landing areas.)	Wildfire prevention or Wildfire firefighting enhancements.	Not Complete	No	Project combined with PCWA-04 Replace Wooden Infrastructure. .

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
12	Canals run into pipe rather than flumes have less of a probability of failing and have a greater chance of surviving wildfire.	Replace Wooden Flume Structures	Not Complete	Yes	The Agency seeks to replace wooden flume structures where practical to prevent wildfire and hazardous materials interruptions. Pulp Mill Flumes 1 and 2 were replaced in 2022 with open channel gunite canal and buried siphon piping.
13	Sedimentation removal, dam or spillway projects or maintenance, improving capacity or increasing safety, water management, and water storage.	Reservoir - dam capacity and water management improvement projects.	Not Complete	Yes	
14	Continue to study and identify locations where roads and facilities may be at risk for earth movement and address with anchoring, stabilization and rockfall netting. Where roadways are blocked, clear debris from roadways and stabilize the remaining hillside. In some cases, the hillsides below roadways need to be stabilized.	Rockfall anchoring, stabilization, rockfall netting and slide debris mitigation.	Not Complete	Yes	
15	This project will install automated headgates at each of the spills (controlled release points) to regulate the flows downstream of each automated headgate into the canal and releasing excess flows, up to the historical maximum(s), into the spill channel, measuring each of these flows for record keeping and planning.	Zone 3 Automation	Not Complete	No	Project folded into the PCWA-03 Canal Automation and Encasement and Lining Project.
16	This project will install permanent pumping facilities, either electric, diesel powered, or both, at PG&E Halsey Forebay, connecting to existing piping under Christian Valley Road, to supply water to the Bowman Canal for use at the PCWA Bowman and Christian Valley WTP's.	Pumps at Halsey Forebay	Not Complete	No	Project folded into PCWA-02 Placer County Drought Resilience Plan
17	This project will install sufficient diesel-powered electrical generation, providing and un-interrupted water supply from the American River during PSPS or other electrical interruptions that occur during the same time as a reduction in water supply.	Backup Electrical Generation at American River and Ophir Road Pump Stations	Not Complete	Yes	
18	Multiple partners have found shared interests in the American River Watershed and have sponsored, and are working the project to thin overgrowth and restore natural meadows as firebreaks. The work is creating healthy, forests resistant to wildfire. The wildfire fuels are being harvested for energy and raw material use. Scientific study is ongoing.	Sierra Forest Restoration Partnerships	Not Complete	Yes	

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
19	This project would construct a new water treatment plant north of the Colfax City limit and associated transmission facilities along an 8-mile stretch of the I-80 corridor. This would provide small and underfunded water providers between Colfax and Applegate with a supplemental secure source of potable water supply during dry periods. Additionally, fire hydrants would be located along the transmission pipeline as a source of water supply to aid in firefighting activities of wildfires that could spark or move to within the area.	Colfax to Applegate Water Reliability Project	Not Complete	Yes	
20	As part of enhancing and encouraging travel in the area using public transit, Placer County is planning to add a third travel lane to both highways for use by public transit and high occupancy vehicles only. Funding for this type of infrastructure will require several years to secure. The third lane could be used by emergency vehicles and/or evacuation purposes in the event of a large-scale emergency. This type of infrastructure should be considered the highest priority to help become fully prepared in eastern Placer County for mitigating the potential impacts of a catastrophic event requiring evacuation to help prevent casualties.	Emergency Evacuation / Transit Priority Lane Infrastructure – Highways 89 and 267	Not Complete	No	This project is not under PCWA's jurisdiction

28.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, PCWA has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- The Agency Water Conservation Program focuses on smart water use and includes residential programs such as free mulch distributions, water wise house and business calls, and rebates for water leaks, smart irrigation controllers, lawn replacement, high-efficiency toilet/urinals, untreated water storage tanks, high-efficiency clothes washing machines, and irrigation efficiencies. For more information about the programs and rebates, customers can visit www.pcwa.net.
- Water System Interties – PCWA maintains multiple water system interties with adjacent water purveyors to provide water during emergencies and increase redundancy of water supply should any hazards cause disruption to the water treatment or delivery system.
- French Meadows Forest Restoration Project – Implemented by a diverse public-private partnership the project protects critical water storage infrastructure and public water supplies in the Middle Fork of the American River watershed by reducing high-severity wildfires through ecologically-based thinning and prescribed fire treatments. As of August 2025, the French Meadows partnership treated approximately 8,700 acres of public and private land in the French Meadows basin.

- Hell Hole Seasonal Storage – In February of 2025, PCWA's Board of Directors approved a $5.8 million contract for the Hell Hole Seasonal Storage increase project to add 7,600 acre-feet of storage at Hell Hole Reservoir. This project is estimated to be completed by winter of 2027.

28.8.4 Hazards Omitted from Mitigation Strategy

PCWA omitted avalanche from its mitigation strategies due to its infrastructure being located outside of the avalanche hazard area.

28.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that PCWA would like to pursue in the future to reduce the risk from hazards.

Table 28-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 28-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	X	-	-
Drought and Water Shortage	X	X	X	-
Earthquake	-	-	X	-
Flood	-	X	-	-
Freeze and Snow	-	X	-	-
Heavy Rains and Storms	-	X	X	-
High Winds and Tornadoes	-	-	X	-
Landslides, Mudslides, and Debris Flows	-	-	X	-
Wildfire	X	X	X	-

LPR = Local Plans and Regulations
SIP = Structure and Infrastructure Project
NSP = Natural Systems Protection
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 28-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 28-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
PCWA-01	Healthy Forests Restoration Act Wildland Urban Interface Designation for American River Watershed	6	1-5 Years	Medium	Low	8.5	High
PCWA-02	Develop and Implement Placer County Drought Resilience Plan	6	1-5 Years	Medium	Low	8.5	High
PCWA-03	Canal Automation and Encasement and Lining Projects	5	1-5 Years	High	High	7.25	Medium
PCWA-04	Replace Wooden Infrastructure (e.g., Flume Structures, Power poles etc.)	5	1-5 Years	High	High	7.25	Medium
PCWA-05	American River and Ophir Road Pump Stations Standby Power Project	5	1-5 Years	High	High	7.25	Medium
PCWA-06	Long Canyon Watershed Protection Project and Other Forest Retreatment Projects	5	1-5 Years	High	High	7.25	Medium
PCWA-07	Sediment Removal and Capacity Enhancement Projects	5	1-5 Years	Medium	High	6.25	Medium
PCWA-08	Rockfall Anchoring, Stabilization, Rockfall Netting and Slide Debris Mitigation Projects	5	1-5 Years	Medium	High	6.25	Medium
PCWA-09	Colfax to Applegate Water Reliability Program	5	1-10 Years	High	High	6.25	Medium
PCWA-12	Operable Dam Spillway Gates at Hell Hole Reservoir	5	1-10 Years	Medium	High	5.25	Low
PCWA-13	Dam Climate Change Adaptation Projects	5	1-10 Years	Medium	High	5.25	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

28.8.6 Mitigation Strategy

Table 28-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in Agency priorities.

Table 28-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PCWA-01	Healthy Forests Restoration Act Wildland Urban Interface Designation for American River Watershed	Designate the American River Watershed a part of the Wildland Urban Interface through the USFS's Healthy Forests Restoration Act. Watersheds that are critical in supply for a downstream community's domestic or agricultural needs can be designated through the corresponding Community Wildfire Protection Plan. This designation would help the Placer County CWPP identify resources to assist in forested land treatment projects that would reduce the risk of catastrophic wildfire damaging water supplies and corresponding water delivery infrastructure. Placer County is the lead on development and implementation of the CWPP, however, PCWA is a contributing and supporting agency with jurisdiction in water supply.	Wildfire, Drought and Water Shortage	PCWA - Resource Management Department	Placer County Office of Emergency Services, Placer County Fire Department	Capital Improvement Budget
PCWA-02	Develop and Implement Placer County Drought Resilience Plan	The Placer County Drought Resilience Plan is a plan that identifies projects, strategies, and policies that mitigate against the extreme impacts of drought. Placer County is the lead on development and implementation of this plan. However, PCWA is a contributing agency and has actions and projects that can help safeguard against drought. For example, one of these actions is developing physical water supply interties (and corresponding agreements) between PCWA's water systems and other neighboring water systems. This provides opportunities for neighboring water purveyors to share water and help each other in times of water shortages. Other drought mitigation projects could include permanent pumps and bypass facilities for lower flows.	Drought and Water Shortage	PCWA - Technical Services Department	Placer County Office of Emergency Services	Capital Improvement Budget
PCWA-03	Canal Automation and Encasement and Lining Projects	This project will install automated headgates at each of the spills (controlled release points) to regulate and measure the flows downstream of each automated headgate into the canal and releasing excess flows into the spill channel. Project would also include strategically encasing canals in pipe underground and/or lining earthen canal section with gunite to prevent water loss and seepage. This will help mitigate issues when the canal waters freeze over, which is a rare occurrence but does cause some delays in deliveries and can cause damage.	Drought and Water Shortage, Freeze and Snow	PCWA - Field Services Department	None	Capital Improvement Budget

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PCWA-04	Replace Wooden Infrastructure (e.g., Flume Structures, Power poles etc.)	Replacing existing wooden infrastructure to harden facilities against wildfire is needed throughout PCWA's service area. For example, canals that convey water through pipes rather than elevated wooden flumes have less of a probability of failing and have a greater chance of surviving wildfire. PCWA has several historical wooden flumes that need replacement by rerouting the canal and encasing it in a pipe underground. Another example, PCWA's 12kV power distribution and some communication poles have wooden poles that need replacement or undergrounding.	Wildfire; High Winds and Tornadoes	PCWA - Field Services Department	None	Capital Improvement Budget
PCWA-05	American River and Ophir Road Pump Stations Standby Power Project	This project will install two (2) 2.5 MW diesel-powered electrical generators, providing an un-interrupted water supply from the American River during PSPS or other electrical interruptions that occur during the same time as a reduction in water supply.	Drought and Water Shortage; Wildfire	PCWA - Technical Services Department	Placer County Department of Public Works	Capital Improvement Budget, FEMA Hazard Mitigation Grant Program
PCWA-06	Long Canyon Watershed Protection Project and Other Forest Retreatment Projects	The Long Canyon Project will expand the forest management activities being completed as part of the French Meadows Forest Management Project into the Long Canyon Creek watershed in an effort to restore areas burned by the Mosquito Fire and reduce the threat of extreme wildfires and the associated impacts to PCWA infrastructure, water quality, recreation, cultural resources, and the environment. Planned treatment acres is 19,500 by various mechanical methods and prescribed fire and hand treatments where necessary. Implementation is set to begin in 2027 and completing in 2031. The Long Canyon Project is within the El Dorado National Forest and is estimated to cost $ 18,000,000. Other similar scale Forest Treatment and Retreatment Projects are planned for future years.	Drought and Water Shortage; Wildfire; High Winds and Tornadoes	PCWA - Resource Management Department	US Forest Service	Capital Improvement Budget
PCWA-07	Sediment Removal and Capacity Enhancement Projects	Sedimentation removal in reservoirs or streams to help restore natural capacity or increase flood safety, water management, and water storage post-wildfire (Mosquito and King Fires).	Drought and Water Shortage; Wildfire; Heavy Rains and Storms; Flood	PCWA - Power Systems Department	Placer County Department of Public Works, US Forest Service	Capital Improvement Budget

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PCWA-08	Rockfall Anchoring, Stabilization, Rockfall Netting and Slide Debris Mitigation Projects	Continue to study and identify locations where roads and facilities may be at risk for earth movement and address with anchoring, stabilization and rockfall netting. Where roadways are blocked, clear debris from roadways and stabilize the remaining hillside. In some cases, the hillsides below roadways need to be stabilized.	Landslides Mudslides and Debris Flows; Earthquake; Heavy Rains and Storms	PCWA - Resource Management Department	US Forest Service, Placer County	Capital Improvement Budget
PCWA-09	Colfax to Applegate Water Reliability Program	This program would construct a new water treatment plant north of the Colfax City limit and associated transmission facilities along an 8-mile stretch of the I-80 corridor. This would interconnect and increase water reliability to 19 small and underfunded community water systems that struggle to meet demands during times of drought and are hard-pressed to maintain compliance with California's intense regulatory environment. An outcome of this program may be consolidation of some of these small water systems into PCWA's larger more stable water system.	Drought and Water Shortage	PCWA - Technical Services Department	Placer County Department of Public Works	Capital Improvement Budget, State of CA Safe and Affordable Drinking Water Fund
PCWA-12	Operable Dam Spillway Gates at Hell Hole Reservoir	The project will install operable gates on the currently fixed spillway at Hell Hole Reservoir. Being able to keep the gates lowered during winter will preserve the current mode of safe reservoir operation during winter. Raising the gates in spring will allow capture of spring runoff that would otherwise escape over the spillway.	Drought and Water Shortage; Wildfire	PCWA - Power Systems Department	California Department of Water Resource	Capital Improvement Budget
PCWA-13	Dam Climate Change Adaptation Projects	Increase the capacity of dam or spillway infrastructure to better adapt infrastructure to future increased flows from changing climate patterns and corresponding safety management.	Heavy Rains and Storms, Dam Failure	PCWA - Technical Services Department	California Department of Water Resource	Capital Improvement Budget

29. Placer Hills Fire Protection District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in Placer Hills Fire Protection District (Placer Hills FPD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Placer Hills FPD, describes who participated in the planning process, assesses Placer Hills FPD 's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Placer Hills FPD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

29.1 Hazard Mitigation Planning Team

Placer Hills FPD identified primary and alternate MJHMP points of contact and developed this plan over the course of several months, with input from many County departments.

Primary Point of Contact: Mark D'Ambrogi, Assistant Chief

Address: P.O. Box 350 Meadow Vista, CA 95722

Phone Number: 530-878-0405 ext. 205

Email: dambrogi@placerhillsfire.org

Alternate Point of Contact: John Williamson, Battalion Chief

Address: P.O. Box 350 Meadow Vista, CA 95722

Phone Number: 530-878-0405

Email: jwilliamson@placerhillsfire.org

The Assistant Chief represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 29-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 29-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Mark D'Ambrogi	Placer Hills FPD	Assistant Chief	Supported worksheet completion and draft document review
John Williamson	Placer Hills FPD	Battalion Chief	Supported worksheet completion and draft document review
Michelle Armstrong	Placer Hills FPD	District Manager	Supported worksheet completion and draft document review
Rhia Fairchild	Placer Hills FPD	Administrative Assistant	Supported worksheet completion and draft document review
Ian Gow	Placer Hills FPD	Fire Chief	Supported worksheet completion and draft document review

29.2 Community Profile

The Placer Hills FPD has deep roots in community involvement and collaboration. It began in 1949 when Meadow Vista residents formed the Meadow Vista Fire Department through the local Grange. Over the decades, the District expanded through partnerships with neighboring communities, eventually consolidating in 1988 to form the Placer Hills FPD.

Today, the District serves more than 12,000 residents across 34 square miles, with approximately 4,000 homes. It operates multiple stations, provides advanced life support services, and maintains a strong volunteer and intern program to support nearly 1,000 annual calls.

Committed to fire prevention and public safety, the District invests in modern equipment, training, and community programs. Its efforts are supported by benefit assessments and facility fees, ensuring state-of-the-art resources and reliable staffing. With a proud history of service and innovation, Placer Hills FPD continues to prioritize the protection of life and property for the communities it serves (Placer Hills Fire 2025).

29.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Placer Hills FPD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

29.3.1 Outreach Activities

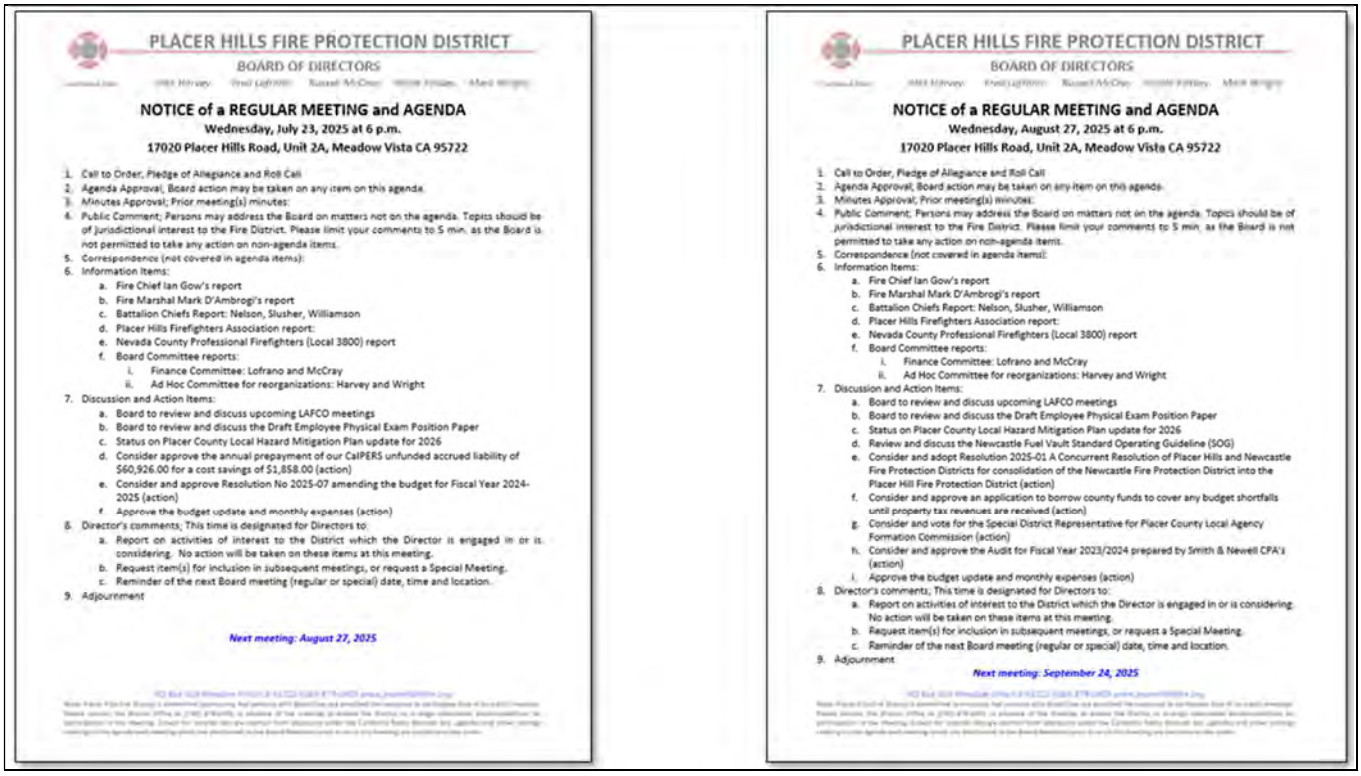
Placer Hills FPD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District made printed MJHMP materials available in the lobbies of Fire Station 84, 86, and Administration Offices. In addition, the District posted information about the MJHMP, hazard mitigation public survey, and Hazard Mitigation Planning Committee meetings on their website. Finally, the District maintains a standing MJHMP agenda item at its monthly Board meetings, providing the public an opportunity to attend and engage. This forum also enables staff to deliver status updates on the MJHMP process to the District's elected officials. The District's outreach efforts are shown in Figure 29-1 through Figure 29-3.

Figure 29-1. Printed Materials – Lobby of Fire Station 84 and Fire Station 86

Figure 29-2. Website - Public Outreach Activities

Figure 29-3. Public Board of Directors Meetings, July and August 2025



PLACER HILLS FIRE PROTECTION DISTRICT
BOARD OF DIRECTORS

NOTICE of a REGULAR MEETING and AGENDA
Wednesday, July 23, 2025 at 6 p.m.
17020 Placer Hills Road, Unit 2A, Meadow Vista CA 95722

1. Call to Order, Pledge of Allegiance and Roll Call
2. Agenda Approval; Board action may be taken on any item on this agenda.
3. Minutes Approval; Prior meeting(s) minutes:
4. Public Comment; Persons may address the Board on matters not on the agenda. Topics should be of jurisdictional interest to the Fire District. Please limit your comments to 5 min. as the Board is not permitted to take any action on non-agenda items.
5. Correspondence (not covered in agenda items):
6. Information Items:
   a. Fire Chief Ian Gow's report
   b. Fire Marshal Mark D'Ambrogi's report
   c. Battalion Chiefs Report: Nelson, Slusher, Williamson
   d. Placer Hills Firefighters Association report:
   e. Nevada County Professional Firefighters (Local 3800) report
   f. Board Committee reports:
      i. Finance Committee: Lofrano and McCray
      ii. Ad Hoc Committee for reorganizations: Harvey and Wright
7. Discussion and Action Items:
   a. Board to review and discuss upcoming LAFCO meetings
   b. Board to review and discuss the Draft Employee Physical Exam Position Paper
   c. Status on Placer County Local Hazard Mitigation Plan update for 2026
   d. Consider approve the annual prepayment of our CalPERS unfunded accrued liability of $60,926.00 for a cost savings of $1,858.00 (action)
   e. Consider and approve Resolution No 2025-07 amending the budget for Fiscal Year 2024-2025 (action)
   f. Approve the budget update and monthly expenses (action)
8. Director's comments; This time is designated for Directors to:
   a. Report on activities of interest to the District which the Director is engaged in or is considering. No action will be taken on these items at this meeting.
   b. Request item(s) for inclusion in subsequent meetings, or request a Special Meeting.
   c. Reminder of the next Board meeting (regular or special) date, time and location.
9. Adjournment

Next meeting: August 27, 2025

PLACER HILLS FIRE PROTECTION DISTRICT
BOARD OF DIRECTORS

NOTICE of a REGULAR MEETING and AGENDA
Wednesday, August 27, 2025 at 6 p.m.
17020 Placer Hills Road, Unit 2A, Meadow Vista CA 95722

1. Call to Order, Pledge of Allegiance and Roll Call
2. Agenda Approval; Board action may be taken on any item on this agenda.
3. Minutes Approval; Prior meeting(s) minutes:
4. Public Comment; Persons may address the Board on matters not on the agenda. Topics should be of jurisdictional interest to the Fire District. Please limit your comments to 5 min. as the Board is not permitted to take any action on non-agenda items.
5. Correspondence (not covered in agenda items):
6. Information Items:
   a. Fire Chief Ian Gow's report
   b. Fire Marshal Mark D'Ambrogi's report
   c. Battalion Chiefs Report: Nelson, Slusher, Williamson
   d. Placer Hills Firefighters Association report:
   e. Nevada County Professional Firefighters (Local 3800) report
   f. Board Committee reports:
      i. Finance Committee: Lofrano and McCray
      ii. Ad Hoc Committee for reorganizations: Harvey and Wright
7. Discussion and Action Items:
   a. Board to review and discuss upcoming LAFCO meetings
   b. Board to review and discuss the Draft Employee Physical Exam Position Paper
   c. Status on Placer County Local Hazard Mitigation Plan update for 2026
   d. Review and discuss the Newcastle Fuel Vault Standard Operating Guideline (SOG)
   e. Consider and adopt Resolution 2025-01 A Concurrent Resolution of Placer Hills and Newcastle Fire Protection Districts for consolidation of the Newcastle Fire Protection District into the Placer Hill Fire Protection District (action)
   f. Consider and approve an application to borrow county funds to cover any budget shortfalls until property tax revenues are received (action)
   g. Consider and vote for the Special District Representative for Placer County Local Agency Formation Commission (action)
   h. Consider and approve the Audit for Fiscal Year 2023/2024 prepared by Smith & Newell CPA's (action)
   i. Approve the budget update and monthly expenses (action)
8. Director's comments; This time is designated for Directors to:
   a. Report on activities of interest to the District which the Director is engaged in or is considering. No action will be taken on these items at this meeting.
   b. Request item(s) for inclusion in subsequent meetings, or request a Special Meeting.
   c. Reminder of the next Board meeting (regular or special) date, time and location.
9. Adjournment

Next meeting: September 24, 2025

29.3.2 Public Feedback Integration

Public input was collected at the monthly Board meetings where status of the planning process was provided and public comment was taken from those in attendance. The most common concerns expressed were regarding wildfire and the Fire Districts' capabilities to respond to such events. Evacuation concerns were also expressed in light of the most recent River Fire in Colfax where I-80 and Placer Hills Rd were impacted. Finally, the public asked about major fuel reduction projects being implemented by CAL FIRE.

These insights were used to adjust the hazard rankings in the plan, ensuring that the final rankings reflected not only technical data but also the lived experiences and concerns of the community.

29.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

29.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County. In addition, all these agencies work collectively during large incidents.

- CAL FIRE
- Placer County Office of Emergency Services
- Placer County Sheriff's Office

29.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. The District actively works with the Placer County Planning and Building Departments on a consistent basis.

- Placer County Building Department
- Placer County Community Development Resource Agency & Planning Services

29.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District.

- City of Auburn
- City of Colfax
- Placer County Office of Emergency Services

29.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District. The Fire District works with the local water providers to ensure services during emergencies. The School District works with the Fire District to coordinate emergency plans.

- Placer Hills Union School District
- Placer County Water Agency
- Meadow Vista County Water Company
- Midway Heights County Water District

29.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District. This stakeholder can be engaged in the LHMP process to become familiar with the plan.

- Meadow Vista Lions Club
- Placer Sierra Fire Safe Council
- United Auburn Indian Community

29.5 Jurisdictional Capability Assessment

Placer Hills FPD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer Hills FPD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Placer Hills FPD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the District or municipality where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

29.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 29-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 29-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Fire Code **Title 24, Part 9** **January 1, 2026**	The California Fire Code is a comprehensive set of state regulations based on the International Fire Code (IFC) that establishes standards for life and property safety from fire and explosion hazards. It covers areas such as the storage and handling of hazardous materials, building construction, fire suppression systems, and conditions hazardous to life and property.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

29.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 29-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 29-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Capital Improvement Plan or Program	Aligned with hazard mitigation to ensure that infrastructure projects reduce community vulnerabilities and enhance resilience against identified hazards	Collaborate with Placer County on zoning, WUI, seismic, Flood zone, and other related development standards when expanding existing facilities and or building new facilities such as fire stations and training centers.	Board of Directors/ Administration
Community Wildfire Protection Plan	This project addresses wildfire hazard within Placer County. It contains mitigation actions and a mitigation strategy to reduce wildfire risk. The CWPP is integrated with the 2021 MJHMP.	The fire district collaborates with Placer OES on the CWPP	Placer County Office of Emergency Services
Other Community Plan	The fire district participates and supports FIREWISE communities throughout the district	The fire district plans to expand participation in FIREWISE communities and strengthen wildfire prevention efforts.	Placer County Office of Emergency Services
Emergency Operations Plan	The fire district is integrated in the EOP through the Fire Representative in the EOP.	The fire district will enhance its role in the EOP by increasing coordination and training opportunities.	Placer County Office of Emergency Services

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate wildfire-related policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

29.5.3 Development and Permitting Capability

Placer Hills FPD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

29.5.4 Administrative Capability

Table 29-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 29-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Placer Hills FPD Board of Directors	The Board can endorse hazard mitigation projects.
Emergency Management/Public Safety Department	Fire and medical response
Mutual aid agreements	As per Western Placer County Fire Chiefs Association
Human Resources Manual e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	Emergency fire and medical response as part of the job descriptions

29.5.5 Technical Capability

Table 29-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 29-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Emergency Manager	Fire Chief acts as the emergency manager
Other (this could include stormwater engineer, environmental specialist, etc.)	Fire Code inspectors and enforcement

29.5.6 Fiscal Capabilities

Table 29-6 summarizes financial resources available to Placer Hills FPD.

Table 29-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Authority to levy taxes for specific purposes	Special tax assessments levied on properties throughout the fire district as additional source of funding
Impact fees for homebuyers or developers of new development/homes	Mitigation impact fees collected to offset capital assets on new development for emergency response
Incur debt through special tax bonds	The fire district has the ability to secure funding for capital projects through special tax bonds

29.5.7 Education and Outreach Capability

Table 29-7 summarizes the education and outreach resources available to Placer Hills FPD.

Table 29-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Typically through the Fire Prevention/Administration For large scale incidents, the Placer County PIO is used and collaborates with the Fire District PIO
Hazard mitigation information available on your website	General fire prevention materials, programs, requirements, and information is provided to the public
Natural disaster/safety programs in place for schools	Fire Prevention programs delivered in schools includes wildfire issues
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Through NGO's, presentations are requested at various events that focus on hazards, risks, and prevention

29.5.8 Community Classifications

Table 29-8 summarizes classifications for community programs available to Placer Hills FPD.

Table 29-8. Community Classifications

Program	Participating	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3/3Y	2021
Firewise Communities classification	Yes	Various in district	ongoing
CAL FIRE Risk Reduction Community List	Yes	(Placer County)	2024

29.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 29-9 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 29-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Moderate- resources have some capabilities for flood events along with training
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Moderate- the District utilizes specialized equipment for snow events, personnel are trained for snow response
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Strong

29.6 National Flood Insurance Program

Placer Hills Fire Protection is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

29.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer Hills FPD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

29.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 29-4 through Figure 29-7. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Placer Hills FPD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 29-4. Dam Inundation Hazard Area

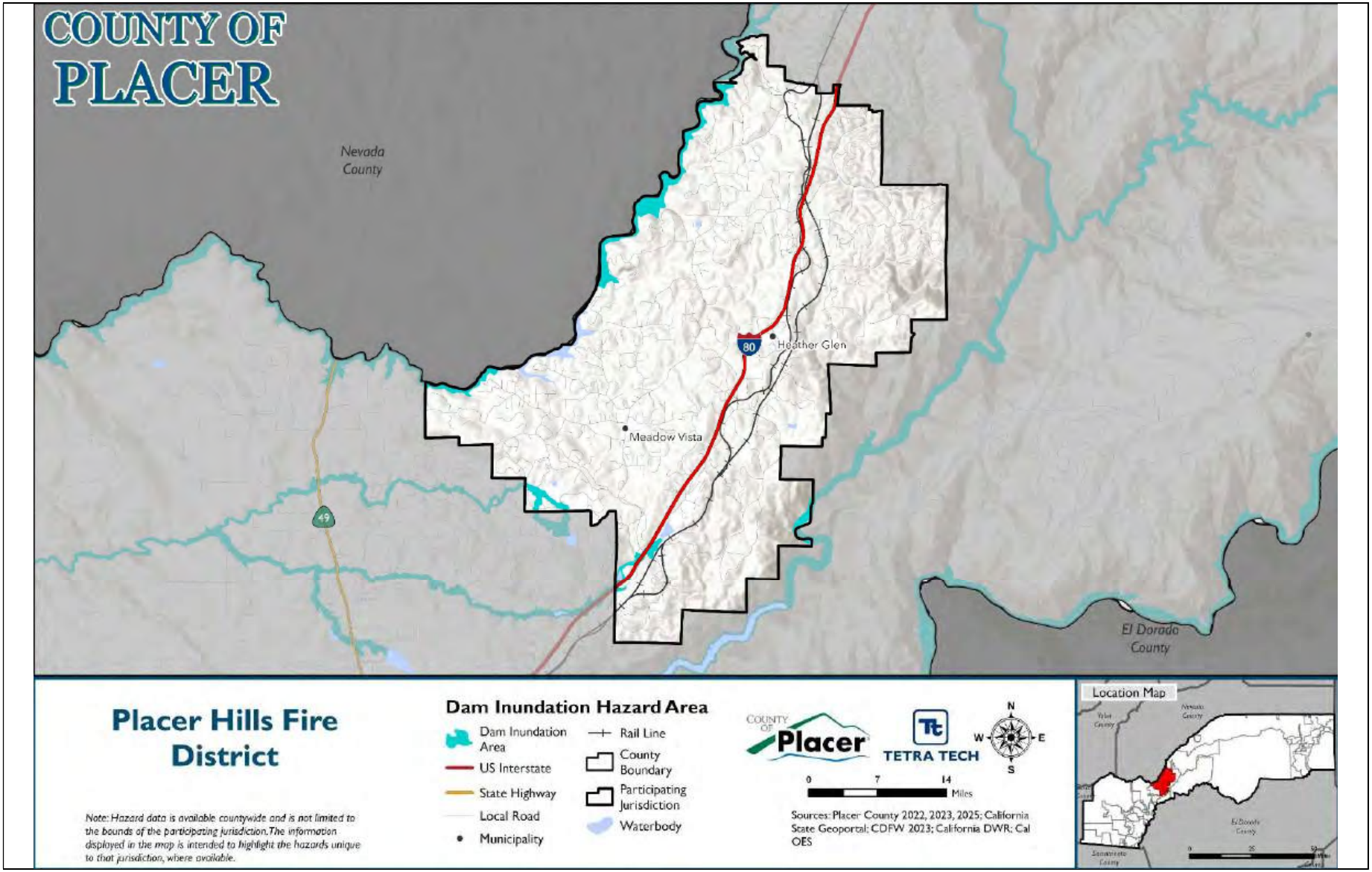


Figure 29-5. Flood Hazard Area

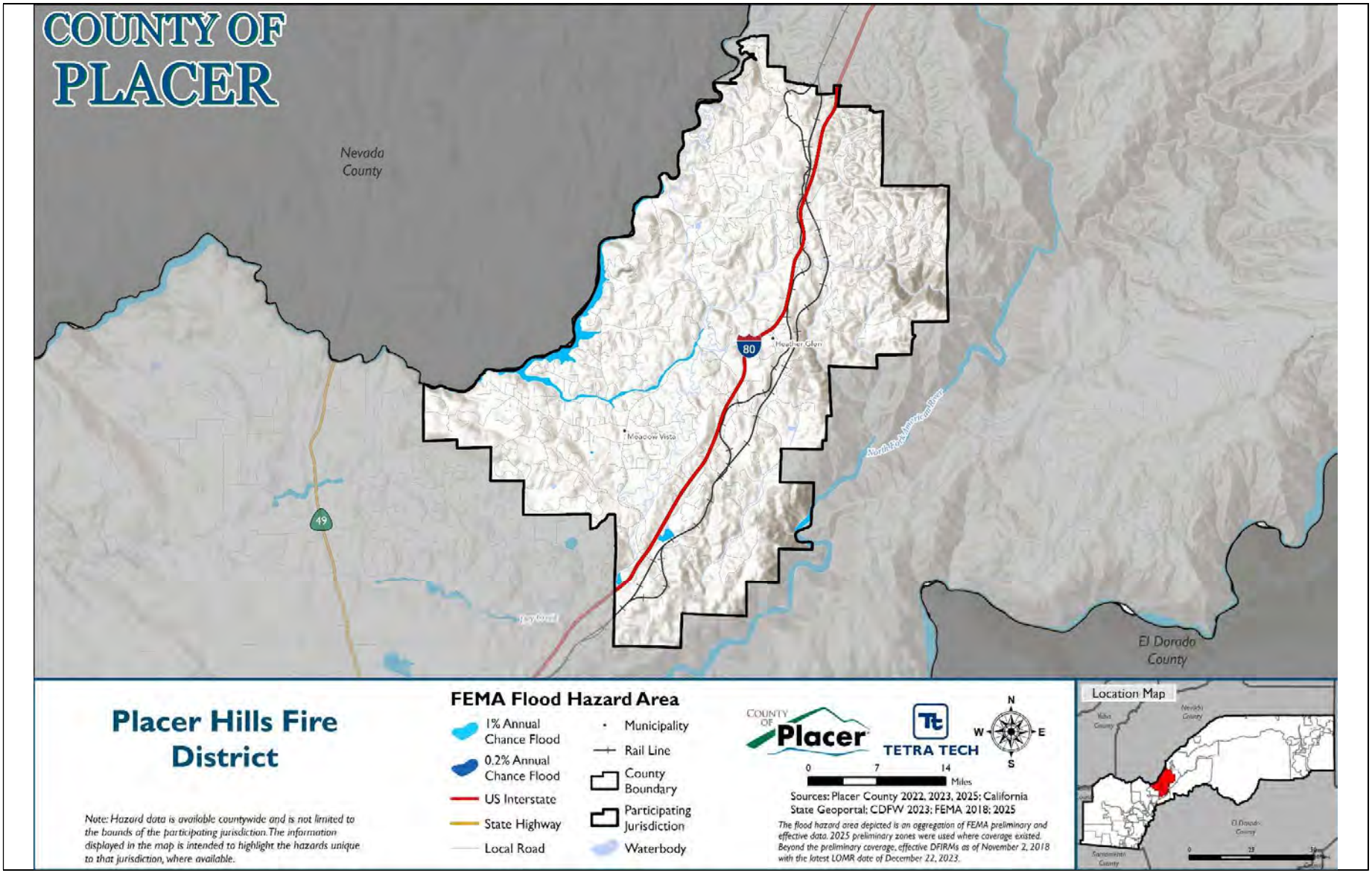


Figure 29-6. Landslide Hazard Area

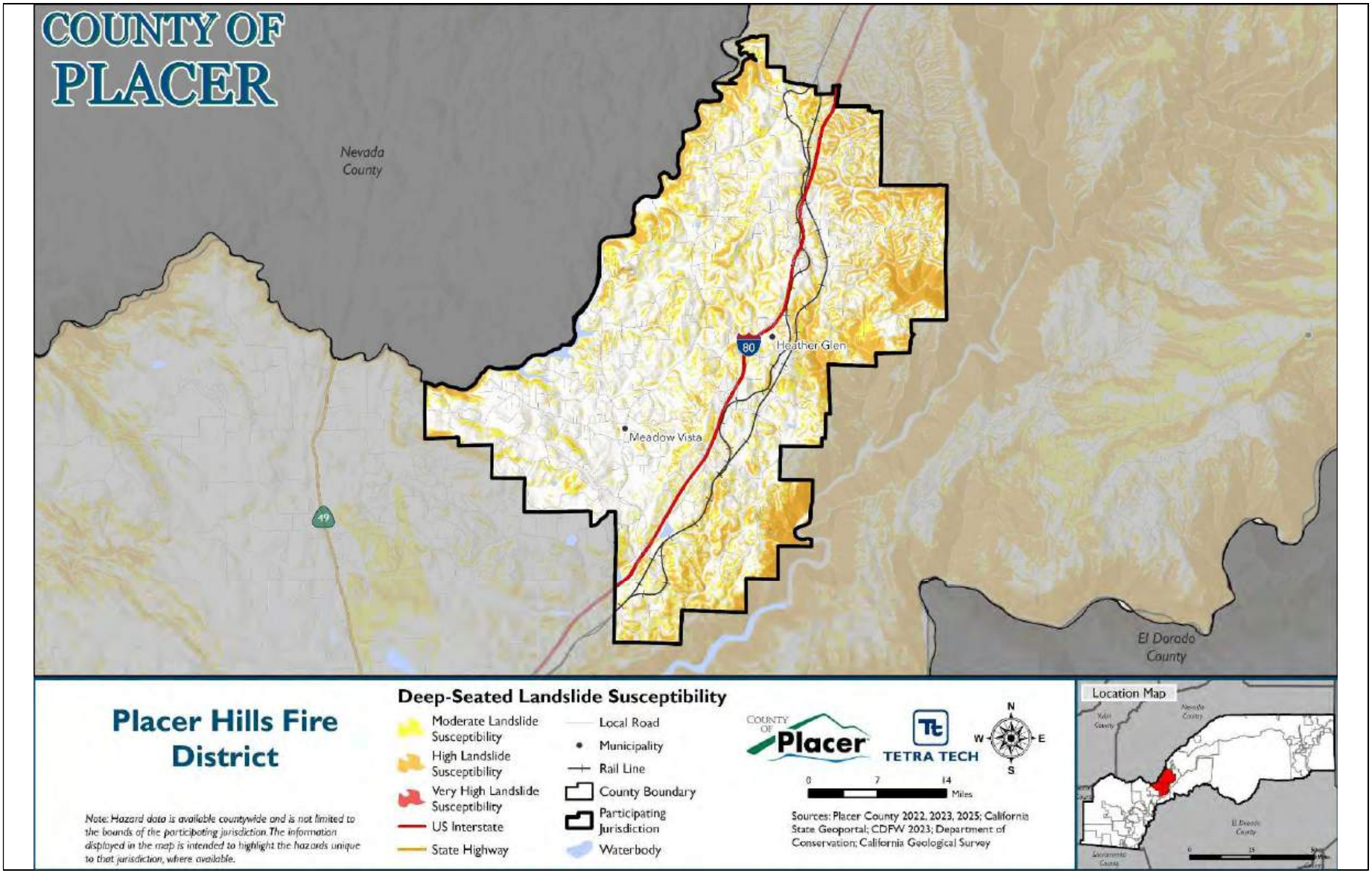
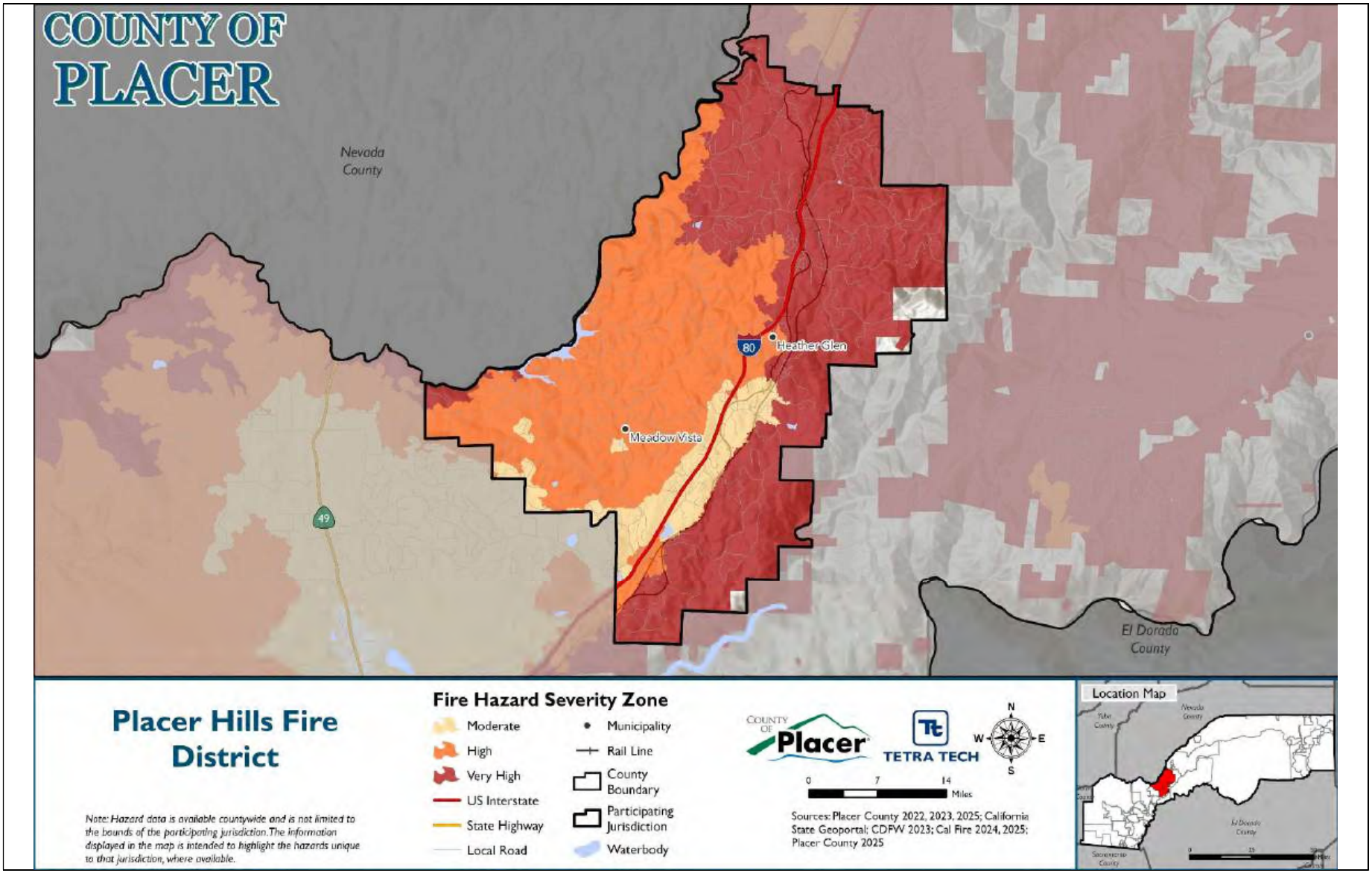


Figure 29-7. Wildfire Hazard Area



29.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 29-10 provides details on loss and damage in Placer Hills FPD during hazard events since the last hazard mitigation plan update.

Table 29-10. Hazard Event History in Placer Hills FPD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 21, 2021	December 28, 2021	Strong Wind	Several high impact winter storms impacted the region around the Christmas holiday. Widespread precipitation, low snow levels of 500 to 2500 feet, and strong and damaging winds resulted. Impacts ranged from fallen trees, downed power and phone lines, with widespread and extended outages, treacherous driving conditions including chain controls and extended highway closures due to wind and/or snow, multiple accidents and spin outs due to snow, damaged property due to snow and wind. Governor Gavin Newsom declared a state of emergency in 20 California counties due to the impacts from the series of storms. The affected areas include: El Dorado, Nevada, Placer, Sacramento and Yuba counties, but also Los Angeles and parts of the Bay Area. As of 12/29 1300 hours, Cal-OES estimated that the late December storm damages to roadway infrastructure total $22.2 million. Warming centers were also opened across the region for those impacted by the stormy weather	Power outages due to trees down and heavy snow. Road closures due to heavy and deep snow. Limited access to drive ways and homes. Placer Hills Fire District had to up staff extra engines to deal with the number of calls to 911. Total of two engines, 2 Battalion Chiefs extra staffing- total of six persons Overtime
September 7, 2022	September 30, 2022	Wildfire	The Mosquito Fire began in Placer County 4 miles east of Foresthill near Mosquito Ridge Road, CA, and close to Oxbow Reservoir the evening of September 6, 2022, at 6:27 PM PDT and later spread into El Dorado County. Extreme fire behavior was observed due to the very dry humidity and fuels, with the fire developing large plumes that radar indicated extended up to 40,000 feet. In the first few days, the fire saw rapid growth at 5,705 acres by 7 pm PDT on the 7th and 13,705 acres by 8 pm PDT on the 8th. More than 11,000 people were evacuated and 9,000 structures were threatened. The fire included areas in both the Tahoe and Eldorado National Forests. The fire burned a total of 76,788 acres and caused road closures throughout the area. There were 2 firefighters injured during the fire. A total of 78 structures were destroyed and an additional 13 buildings were damaged in the towns of Foresthill, Volcanoville, and Michigan Bar. Periods of moderate to heavy rain from September 18-21 largely halted fire growth, but the fire was not considered fully contained until October 22.	Placer Hills Fire sent a Battalion Chief to lead a Placer County OES Strike Team to assist with the incident. Overtime

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Localized flooding and power outages due to power lines down Increase in call volume
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	OES- Preposition (Mud / Debris) CA-OES-230013-XPL extra staffing O-20230582-PHF Placer Hills Fire District up staffed an extra engine and staffed it with 3 people for the event. The engine and staffing were available to be used in OES Region IV. Heavy snow causing access issues for emergency vehicles and power outages Increase in call volume Overtime for staffing

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	OES- Preposition (Mud / Debris) CA-OES-230036-XPL extra staffing O-20230127-PHF Placer Hills Fire District up staffed an extra engine and staffed it with 3 people for the event. The engine and staffing were available to be used in OES Region IV. Heavy snow causing access issues for emergency vehicles and power outages Increase call volume Overtime for staffing
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	Power outages due to trees down and heavy snow. Road closures due to heavy and deep snow. Limited access to driveways and homes. Placer Hills Fire District had to up staff extra engines to deal with the number of calls to 911. Total of two engines, 2 Battalion Chiefs extra staffing- total of six persons Increase in call volume Overtime for extra staffing

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
March 4, 2023	March 7, 2023	Winter Weather	A powerful, cold storm system with heavy snow and gusty winds sometimes brought dangerous driving with whiteout conditions. Snow amounts of 3 to 5 feet were reported in the mountains. Heavy snow fell down into the foothills impacting travel. Numerous schools were closed or had delays due to the snow. Gusty winds of 40-50 mph were recorded across the area, with gusts locally higher in the high elevations of the northern Sierra. The winds and low snow combined to cause dangerous travel conditions with an extended closure of Interstate 80. Accumulating snow fell into the Motherlode foothills. CoCoRaHS snowfall reports included 3.0 inches at Grass Valley 2.7 SW, and 2.5 inches at Sonora 3.4E, 3.5 inches at Volcano 3.2N and 5.8 inches of snow at Camino 1.2 N. Schools and businesses were reported closed. Numerous power outages were reported, including continued outages from previous storms. Several storage units collapsed in Grass Valley due to heavy snow load. No injuries reported.	Localized flooding and loss of power due to power lines down Increase in call volume

29.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Placer Hills FPD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- The freeze and snow ranking increased from low to medium because when is does snow in the District, is usually requires District resources to mitigation impacts.
- The wildfire hazard ranking increased from medium to high because most of the District is located within a Very High or High Fire Hazard Severity Zone (VHFHSZ or HFHSZ).

Table 29-11 shows Placer Hills FPD ‘s final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 29-11. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Medium - when snow does occur it usually is an event that requires District resources to mitigate impacts
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	High - Most of the District is located in a VHFHSZ or HFHSZ

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

29.7.4 Vulnerability Assessment

Table 29-12 lists issues related to the top hazards of concern for Placer Hills FPD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

29.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, **Error! Reference source not found.** describes the potential impacts of the hazards of local concern to Placer Hills FPD (hazards identified as medium or high risk in Table 29-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

29.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect Placer Hills FPD's overall vulnerability since the previous plan was approved.

Table 29-12. Hazard Issues

Issue	Related Hazard
Reduce potential destruction from wildfire. Educate homeowners on steps they can take to protect their property, create a resilient landscape to protect them from wildfire.	Wildfire
Inadequate access for emergency responders. Through inspection and education, residents can mitigate access issues to ensure access for evacuation and response for emergency resources.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Keep informed of potential weather and related events at all time. Be prepared to collaborate with other agencies and activate response plans, have everyone know their roles in a potential emergency.	Wildfire, Heavy Rains and Storms, Flood, High Wind and Tornadoes, Freeze and Snow
Identify areas within the fire district where mitigation measures may be implemented to reduce the destruction of wildlife.	Wildfire
Collaboration with other agencies and organizations to develop response plans, public information, sources of information, and information sharing. Create an environment where all organizations are working together.	Wildfire
Adopt specific amendments to the CA Fire Code that can assist in mitigating natural disasters within the fire district to reduce damage.	Wildfire
Difficulty in locating structures when no address signage is in place. Using a standard addressing system may assist all emergency responders and aid in response and evacuation.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire

Table 29-13. Hazard Impacts

Hazard	Potential Impacts
Wildfire	The District is almost entirely located within a Very High or High Fire Hazard Severity Zones, creating a significant risk of wildfire that could damage facilities, equipment, and threaten personnel despite existing mitigation practices. This includes fire stations 84, 86, and Administration Office. Depending upon magnitude of situation, potential damage to apparatus housed in fire stations.
Freeze and Snow	Severe freeze and snow events can lead to significant operational and community impacts. Heavy snowfall and falling trees often cause widespread power outages and road closures, limiting access to homes and driveways. These conditions increase emergency call volume and require additional staffing and resources to maintain service levels. During past events, the District had to up-staff engines and command personnel, resulting in overtime costs and deployment of extra units to ensure adequate coverage. Access challenges for emergency vehicles and prolonged outages further compound response efforts, highlighting the need for enhanced preparedness and resource allocation during extreme winter weather.

29.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

29.8.1 Changes in Community Priorities

The District's priorities have evolved to place greater emphasis on proactive wildfire risk reduction, improved emergency response capabilities, and enhanced community safety measures. Current efforts focus on strengthening defensible space compliance, improving access for emergency services, and increasing situational awareness during severe weather events. Collaboration with local partners and adherence to state fire safety standards remain central to these priorities, along with initiatives to improve property identification for faster response times. These actions reflect a strategic shift toward comprehensive preparedness and resilience within the community.

29.8.2 Past Mitigation Action Status

Table 29-14 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 29-14. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	Apply Placer County standard for addressing for all new construction throughout the fire district. Identify structures needing appropriate addressing and inform and educate property owners of a standard and consistent addressing means.	Address signage for residential and commercial structures.	Complete	Yes	
2	Through an inspection process, educate, inform, and make recommendation for property owners on what actions to take to reduce the risk of destruction from wildfire. Identify vegetation to remove, reduce, and maintain to achieve defensible space. Identify potential areas of home hardening to better prepare for wildfire. Conduct inspections on private properties to identify specific needs of that property to achieve defensible space.	Defensible space inspection and implementation throughout the District.	Complete	Yes	
3	Through inspection, identify those areas needing fuel reduction along private roadways and driveways. Optimal clearance is 10 feet from each shoulder and 15 vertical clearance. Inform property owners of the importance and their responsibility to create and maintain these accesses for emergency response and civilian evacuation. Implement the formal process of "Notice to Abate" as needed.	Private roadway and driveway vegetation clearances.	Complete	Yes	

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
4	Continued participation and collaboration will occur on an on-going basis. Attending monthly meetings and participate in PSFSC events by command staff member(s).	Participate and collaborate with the Placer Sierra Fire Safe Council (PSFSC) and contribute to the Community Wildfire Protection Plan (CWPP)	Complete	Yes	
5	Obtain the most up-to-date information regarding adverse weather, predicted weather events, and related weather that may impact District response to emergencies.	Heavy Rains, Localized Flooding, Flood, Freeze, and Snow Mitigation	Complete	Yes	

Note: From District: All projects are ongoing and incorporated into district programs

29.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, Placer Hills FPD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Fully engaged and support FIREWISE Communities within the District, promoted new communities to become FIREWISE
- Collaboration with Cal Fire and Resource Conservation District (RCD) on the American River fuel reduction project through letters supporting grant opportunities for such projects
- PG&E funded fuel reduction project in the Winchester Community area, obtained funding and coordinated project
- The PHFPD and NFPD FF Associations provide address signage at a small cost to citizens of both Districts. In 2022 a grant was obtained for a period of two years to provide address signage at no cost to citizens.

29.8.4 Hazards Omitted from Mitigation Strategy

Avalanche was excluded because it is rare even during snowfall. Flooding is also uncommon within the District due to its terrain. All hazards categorized as “Low” may involve the Fire District providing support to other agencies under Placer County’s direction. Mitigation actions for these types of events are identified and managed by Placer County.

29.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Placer Hills FPD would like to pursue in the future to reduce the risk from hazards.

Table 29-15 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 29-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	X	-	-	X
Drought and Water Shortage	X	-	X	X
Earthquake	X	X	-	X
Flood	X	-	-	X
Freeze and Snow	X	-	-	X
Heavy Rains and Storms	X	-	-	X
High Winds and Tornadoes	X	-	-	X
Landslides, Mudslides, and Debris Flows	X	-	X	X
Wildfire	X	-	X	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 29-16 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 29-16. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
PHFPD-01	Defensible Space Inspections	4	1-5 Years	High	Low	9	High
PHFPD-02	Access for Emergency Response	3	1-5 years	High	Low	8.75	High
PHFPD-03	Monitor Weather Events	1	1-5 Years	High	Low	8.25	High
PHFPD-04	Community Wildfire Protection Plan	1	1-5 Years	High	Low	8.25	High
PHFPD-05	Fire Safe Council Collaboration	5	1-5 Years	Low	Low	7.25	Medium
PHFPD-06	CA Fire Code Adoption	1	1-5 Years	Medium	Low	7.25	Medium
PHFPD-07	Address Signage	3	1-5 years	Low	Low	6.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

29.8.6 Mitigation Strategy

Table 29-17 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 29-17. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PHFPD-01	Defensible Space Inspections	Through an inspection process, educate, inform, and make recommendation for property owners on what actions to take to reduce the risk of destruction from wildfire. Identify vegetation to remove, reduce, and maintain to achieve defensible space. Identify potential areas of home hardening to better prepare for wildfire. Conduct inspections on private properties to identify specific needs of that property to achieve defensible space.	Wildfire	Placer Hills FPD Fire Prevention	Placer Hills FPD Administration	Staff time through general fund
PHFPD-02	Access for Emergency Response	Through inspection, identify those areas needing fuel reduction along private roadways and driveways. Optimal clearance is 10 feet from each shoulder and 15 feet vertical clearance. Inform property owners of the importance and their responsibility to create and maintain these accesses for emergency response and civilian evacuation. Implement the formal process of “Notice to Abate” as needed.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Placer Hills FPD Fire Prevention	Placer Hills FPD Administration	Staff time through general fund
PHFPD-03	Monitor Weather Events	Obtain the most up-to-date information regarding adverse weather, predicted weather events, and related weather that may impact District response to emergencies.	Wildfire, Heavy Rains and Storms, Flood, High Wind and Tornadoes, Freeze and Snow	Placer Hills FPD Operations	Placer Hills FPD Administration	Staff time through general fund
PHFPD-04	Community Wildfire Protection Plan	Actively participate in the development and update of the Community Wildfire Protection Plan (CWPP) and implement the action items identified in the plan.	Wildfire	Placer Hills FPD Fire Prevention	Placer Hills FPD Administration	Staff time through general fund
PHFPD-05	Fire Safe Council Collaboration	Continued participation and collaboration by attending monthly meetings and events with the Placer Sierra Fire Safe Council (PSFSC).	Wildfire	Placer Hills FPD Fire Prevention	Placer Hills FPD Administration	Staff time through general fund

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
PHFPD-06	CA Fire Code Adoption	Continue on the three year cycle of adopting the CA Fire Code with amendments to address natural hazards specific to the fire district.	Wildfire	Placer Hills FPD Fire Prevention	Placer Hills FPD Administration	Staff time through general fund
PHFPD-07	Address Signage	Apply Placer County standard for addressing for all buildings throughout the fire district. Identify structures needing appropriate addressing and inform and educate property owners of a standard and consistent addressing means.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Placer Hills FPD Fire Prevention	Placer Hills FPD Administration	Staff time through general fund

30. Placer Mosquito Vector Control District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Placer Mosquito Vector Control District (Placer Mosquito or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Placer Mosquito, describes who participated in the planning process, assesses Placer Mosquito's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Placer Mosquito as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

30.1 Hazard Mitigation Planning Team

Placer Mosquito identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Jake Hartle, Deputy General Manager

Address: 2021 Opportunity Drive, Roseville, CA 95678

Phone Number: 916-380-5444

Email: Jakeh@placermosquito.org

Alternate Point of Contact: Julie Prayter, Public Information Officer

Address: 2021 Opportunity Drive, Roseville, CA 95678

Phone Number: 916-380-5444

Email: juliep@placermosquito.org

The Administration Department represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and

stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 30-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 30-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Joel Buettner	Administration	General Manager	Support
Jake Hartle	Administration	Deputy General Manager	Lead
Isabel Alvarez	Administration	Office Manager	Support
Mary Sorensen	Research	Sr. Research Scientist	Support
Julie Prayter	Administration	Public Information Officer	Lead

30.2 Community Profile

The Placer Mosquito and Vector Control District is an independent, special district located in Northern California. Governed by the California Mosquito and Vector Control Law and a seven-member Board of Trustees, the District operates under a cooperative agreement with the California Department of Public Health. All field staff are state-certified as California Vector Control Technicians, ensuring high standards of public health protection.

The District provides year-round services to nearly 400,000 residents across Placer County, including five cities, one town, and unincorporated areas. Its core mission is to reduce risks from disease-carrying and nuisance vectors through community-wide surveillance, prevention, and control programs. Technicians respond promptly to public reports of vector concerns, conducting on-site inspections and offering guidance on managing mosquitoes, ticks, yellowjackets, and rodents.

The District's main facility in Roseville is a state-of-the-art center housing administrative offices, operational units, a mosquitofish rearing facility, and a laboratory for research and testing. To serve eastern Placer County, the District also operates a substation near Truckee. While the District is one of the newest in the Sacramento region, Placer County has a long history of mosquito control dating back to the early 1900s.

According to Gordon Patterson's The Mosquito Crusades, organized mosquito control in California began in 1909 when Penryn clergyman Fred Morgan sought assistance from University of California entomologist William Herms to combat malaria mosquitoes. Herms emphasized education as the foundation of control efforts, leading to lectures and demonstrations across local communities. By February 1910, a permanent anti-malaria organization was established in Penryn, marking the start of formal mosquito control in the region. In 1915, the California Legislature passed the Mosquito Abatement Act, paving the way for mosquito abatement districts statewide.

The Placer Mosquito and Vector Control District, originally known as the Placer County Mosquito Abatement District, was formed in 1996 to provide mosquito control services in western Placer County. Over time, the District expanded its service area through local tax measures and annexations, including Sheridan in 2004, and established funding mechanisms to support operations in both western and eastern Placer County.

Today, the District employs 23 full-time staff members and hires seasonal personnel during peak mosquito season. Departments include administration, public information and outreach, field operations, technical services, and applied research. Through these efforts, the District remains committed to protecting public health and enhancing quality of life for all Placer County residents.

30.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Placer Mosquito completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

30.3.1 Outreach Activities

Placer Mosquito conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District actively engaged the community to raise awareness about hazard mitigation planning. Information about the MJHMP survey was shared through social media channels and details about the MJHMP were posted on the public notice board outside District offices. Additionally, at the Hot Chili Cool Cars event in Rocklin on September 20, 2025, the District hosted a booth featuring educational materials and resources on hazard mitigation, providing residents with an opportunity to learn more and participate in the planning process. These efforts are shown in Figure 30-1 through Figure 30-3.

30.3.2 Public Feedback Integration

Placer Mosquito did not received any public feedback.

Figure 30-1. Virtual Public Outreach Activities

Figure 30-2. Public Notice Board

Figure 30-3. Public Event

30.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

30.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- California Department of Public Health
- Placer County Public Health Division

30.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. Placer Mosquito works with municipal and county planners and developers to review development plans and provide recommendations that limit standing water, emergent vegetation and ensure access for inspection and mosquito control when needed.

- Placer County Community Development Resource Agency

30.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around Placer County.

- City of Auburn
- City of Colfax
- City of Lincoln
- City of Rocklin
- City of Roseville
- El Dorado County
- Nevada County
- Town of Loomis

30.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around Placer County.

- Pacific Gas & Electric
- Placer County Office of Education
- Sierra Business Council
- Sierra College
- VISIT Placer

30.4.5 Nonprofit Organizations and Community-Based Organizations

These nonprofit and community-based organizations bring valuable local knowledge, resources, and community connections to the MJHMP process. Their engagement ensures that the perspectives of underserved populations, culturally significant lands, and hazard-prone communities are meaningfully incorporated into the planning effort.

- American Red Cross
- Latino Leadership Council
- The Nature Conservancy
- The Salvation Army

30.4.6 Other Stakeholders

UC Master Gardeners of Placer County can help distribute Integrated Vector Management (IVM) messaging to specific groups of people to help prevent the breeding of mosquitoes during disease presence.

- UC Master Gardeners of Placer County

30.5 Jurisdictional Capability Assessment

Placer Mosquito performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer Mosquito to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Placer Mosquito lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

30.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 30-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 30-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code Title 24, Part 2 January 1, 2026	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

30.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 30-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 30-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Strategic Plan	The Placer Mosquito Strategic Plan identifies future costs and revenue source and updates the invasive mosquito response plan. While the plan does not address natural hazards directly, the plan does acknowledge that changing weather patterns will impact the District's operations in the future.	The plan could include a reference to the MJHMP, specifically the District's participation in the plan and dedication to integrate mitigation efforts countywide.	General Manager

As a first-time participant in the MJHMP, the District plans are not currently integrated with the MJHMP. As these local plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The position noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

30.5.3 Development and Permitting Capability

Placer Mosquito is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

30.5.4 Administrative Capability

Table 30-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 30-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Board of Trustees	The Board could endorse hazard mitigation projects.

30.5.5 Technical Capability

Table 30-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 30-5. Technical and Staffing Capabilities

Resources	Description, Expansion, Improvement
Planners or engineers with knowledge of mosquito mitigation	The District has planners and subject-matter experts on staff skilled in mosquito mitigation.

30.5.6 Fiscal Capabilities

Placer Mosquito does not currently have any funding streams to pay for natural hazard mitigation projects.

30.5.7 Education and Outreach Capability

Table 30-6 summarizes the education and outreach resources available to Placer Mosquito.

Table 30-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Description, Expansion, Improvement
Public information officer or communications office	Yes	Public Information Officer
Social media for hazard mitigation education and outreach	Yes	Facebook, Instagram, TikTok, YouTube, Nextdoor, X
Community newsletter	Yes	Website has a section for News that highlights media releases and District news emails.
Natural disaster/safety programs in place for schools	Yes	The District does not conduct severe weather campaigns but does have school-focused educational programs through the Placer Mosquito Learning Lab. This initiative provides teacher-approved lesson plans, interactive assemblies, hands-on internships, and science-based learning opportunities to encourage awareness of public health and vector-borne disease prevention.

Outreach Resources	Available? (Yes/No)	Description, Expansion, Improvement
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Yes	The District has a comprehensive community outreach program as part of its Integrated Vector Management approach. This program promotes mosquito and vector-borne disease awareness, educates residents on how to protect themselves and their communities, and provides updates on District activities. Outreach includes presentations tailored to city councils, neighborhood groups, and community organizations.

30.5.8 Community Classifications

Placer Mosquito does not have formal classifications for community programs.

30.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 30-7 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 30-7. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak

Hazard	Adaptive Capacity
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Weak

30.6 National Flood Insurance Program

Placer Mosquito is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

30.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer Mosquito Vector Control's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

30.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 30-4 through Figure 30-9. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Placer Mosquito has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 30-4. Avalanche Hazard Area

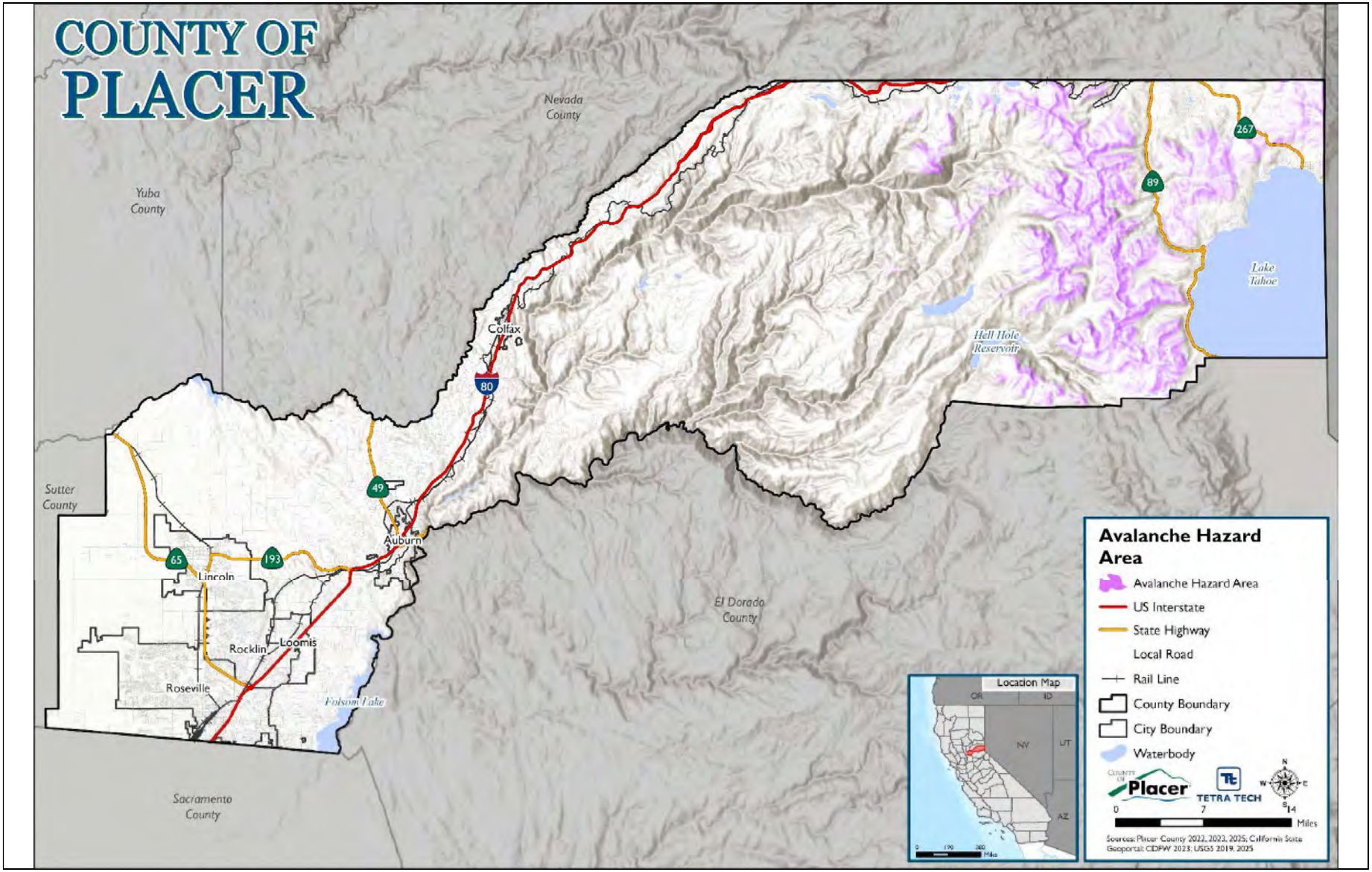


Figure 30-5. Dam Failure Inundation Hazard Area

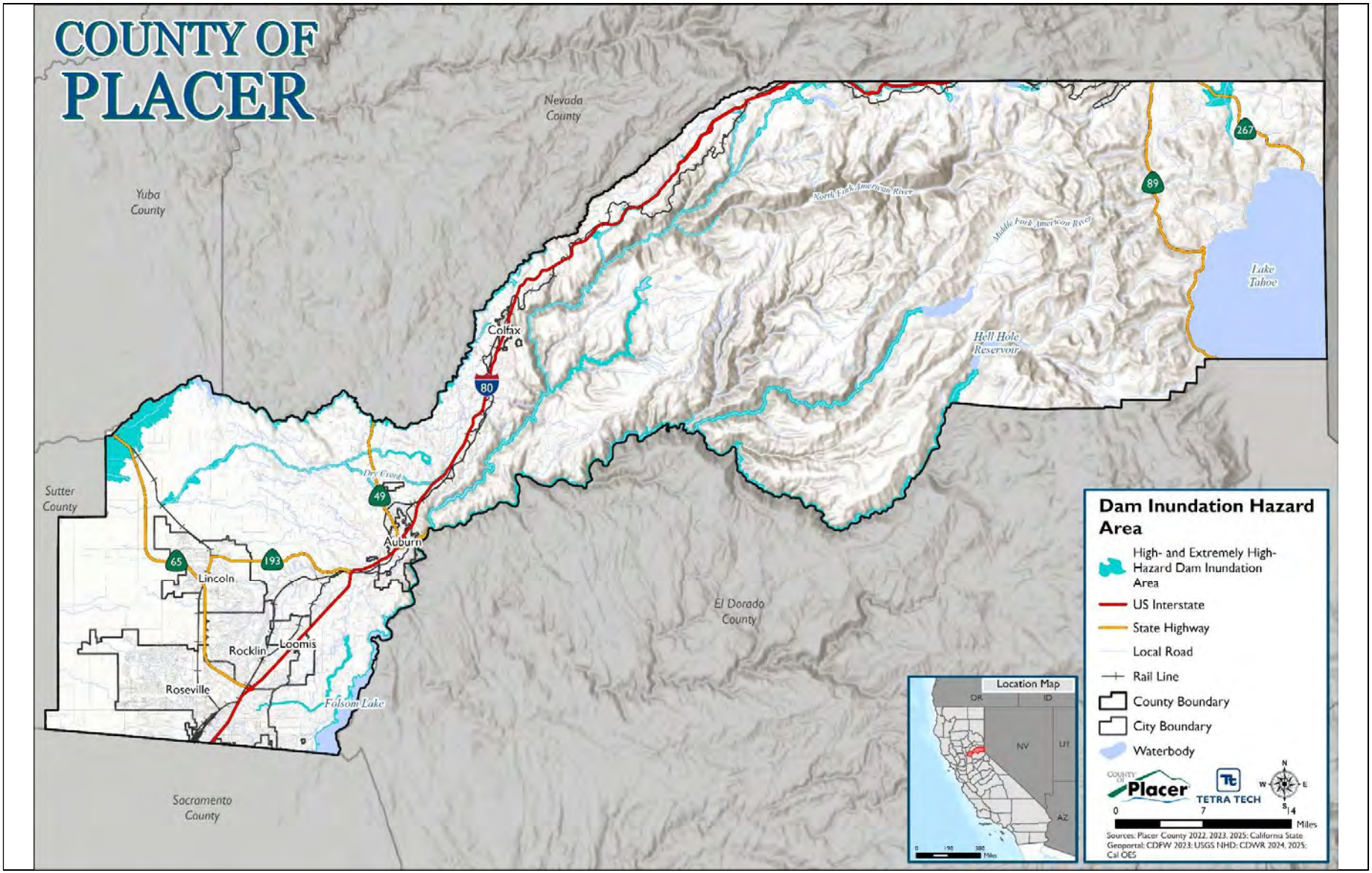


Figure 30-6. Flood Hazard Area

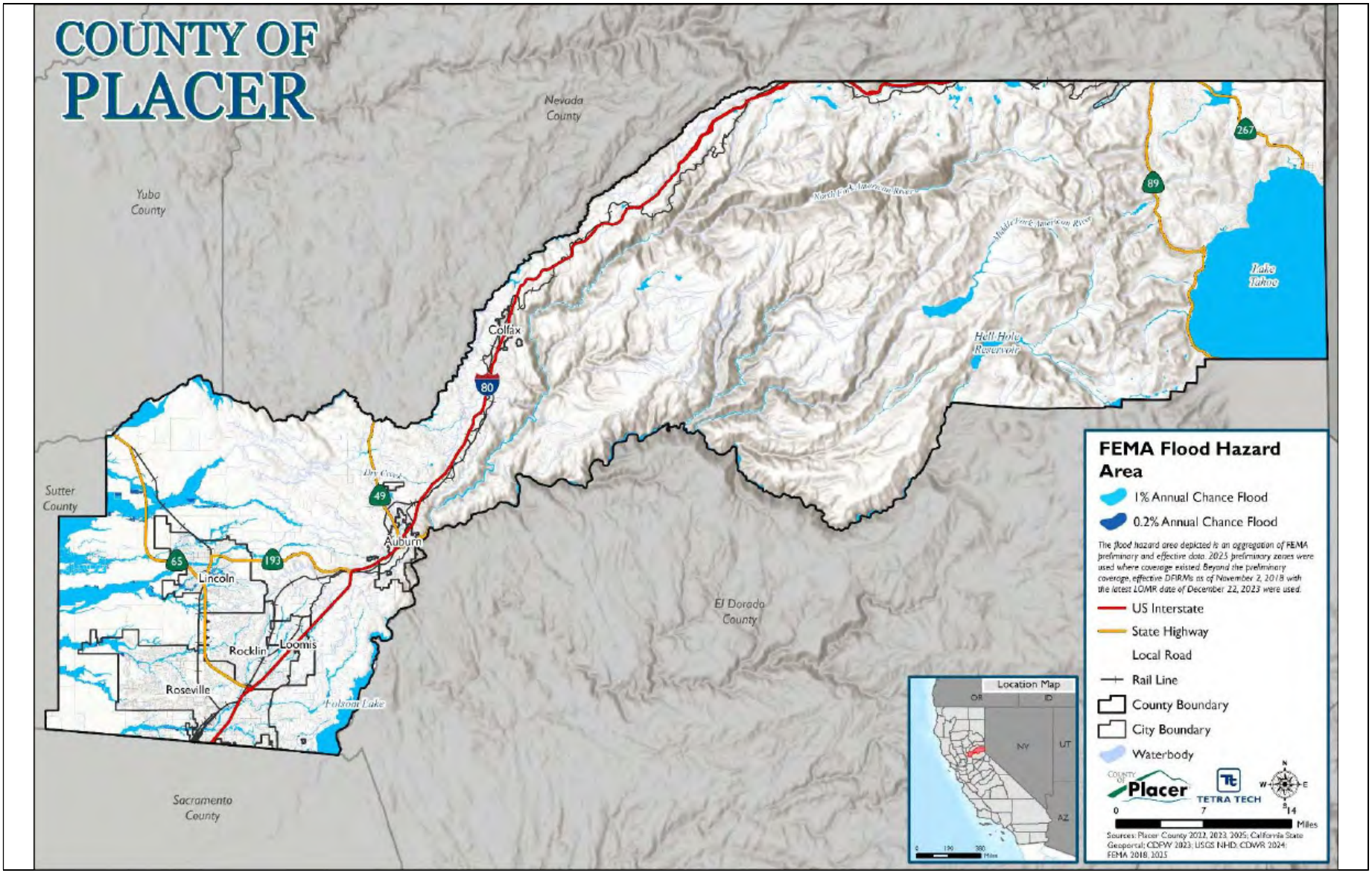


Figure 30-7. Landslide Hazard Area

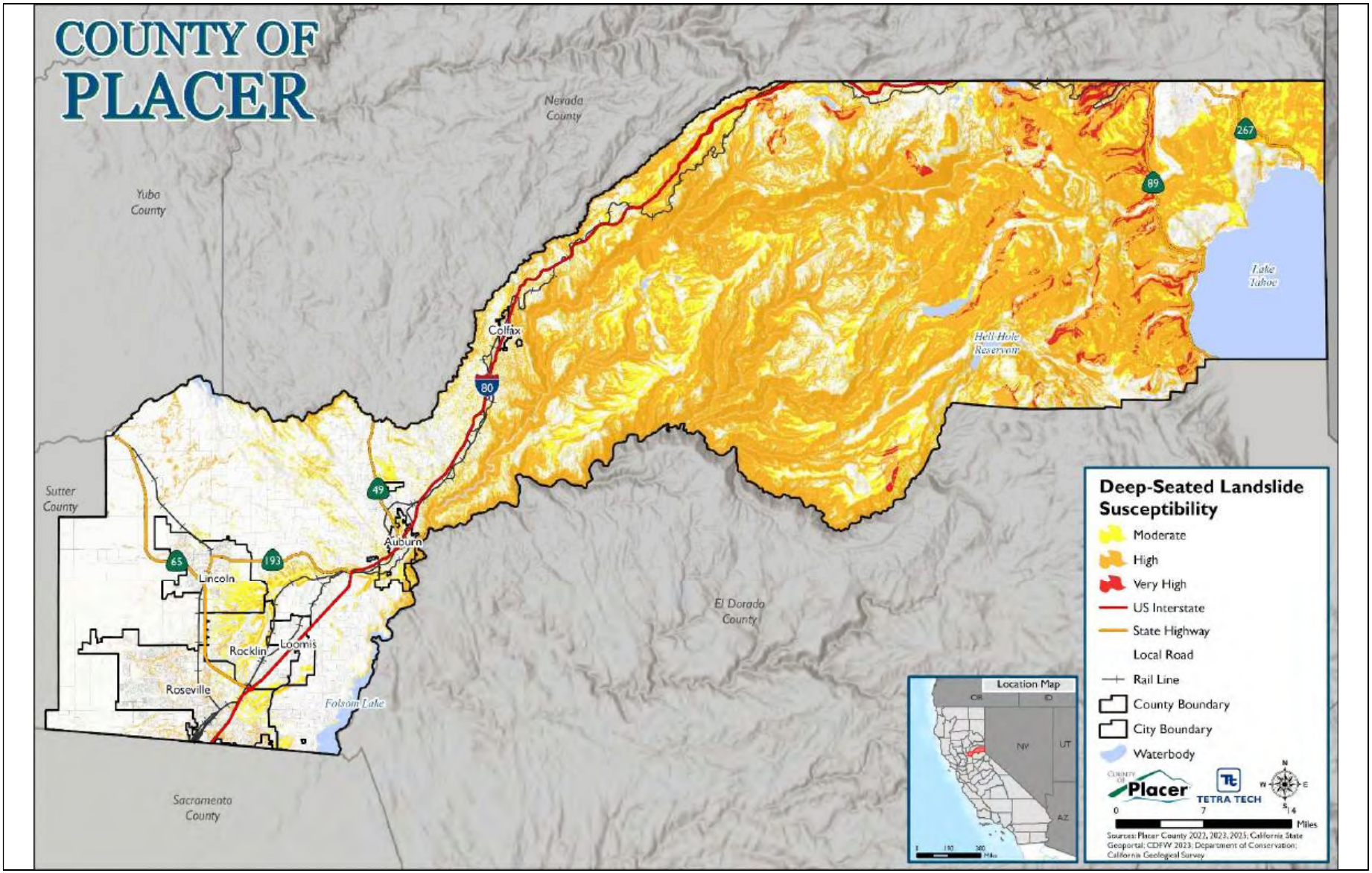


Figure 30-8. NEHRP Hazard Area

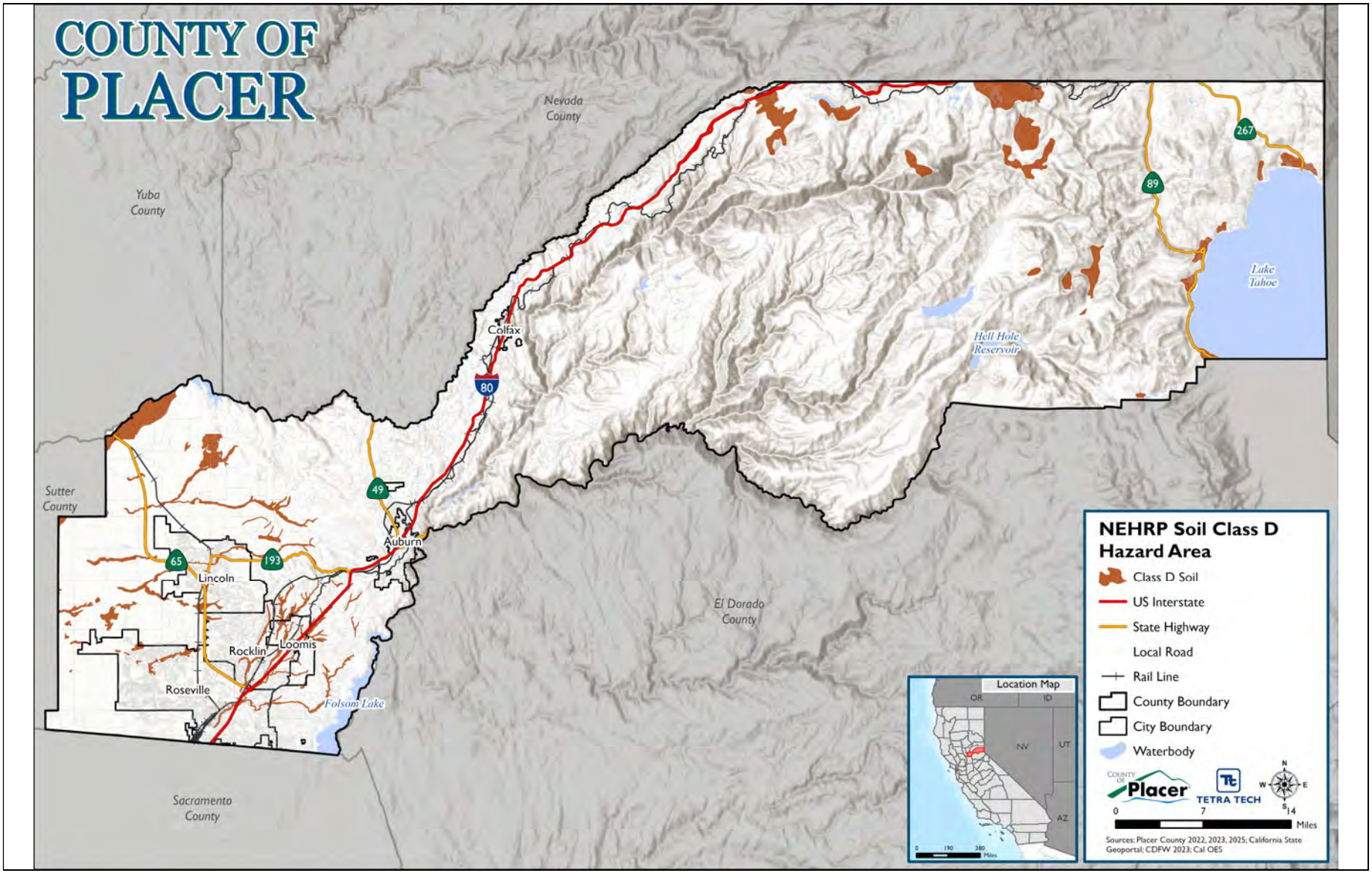
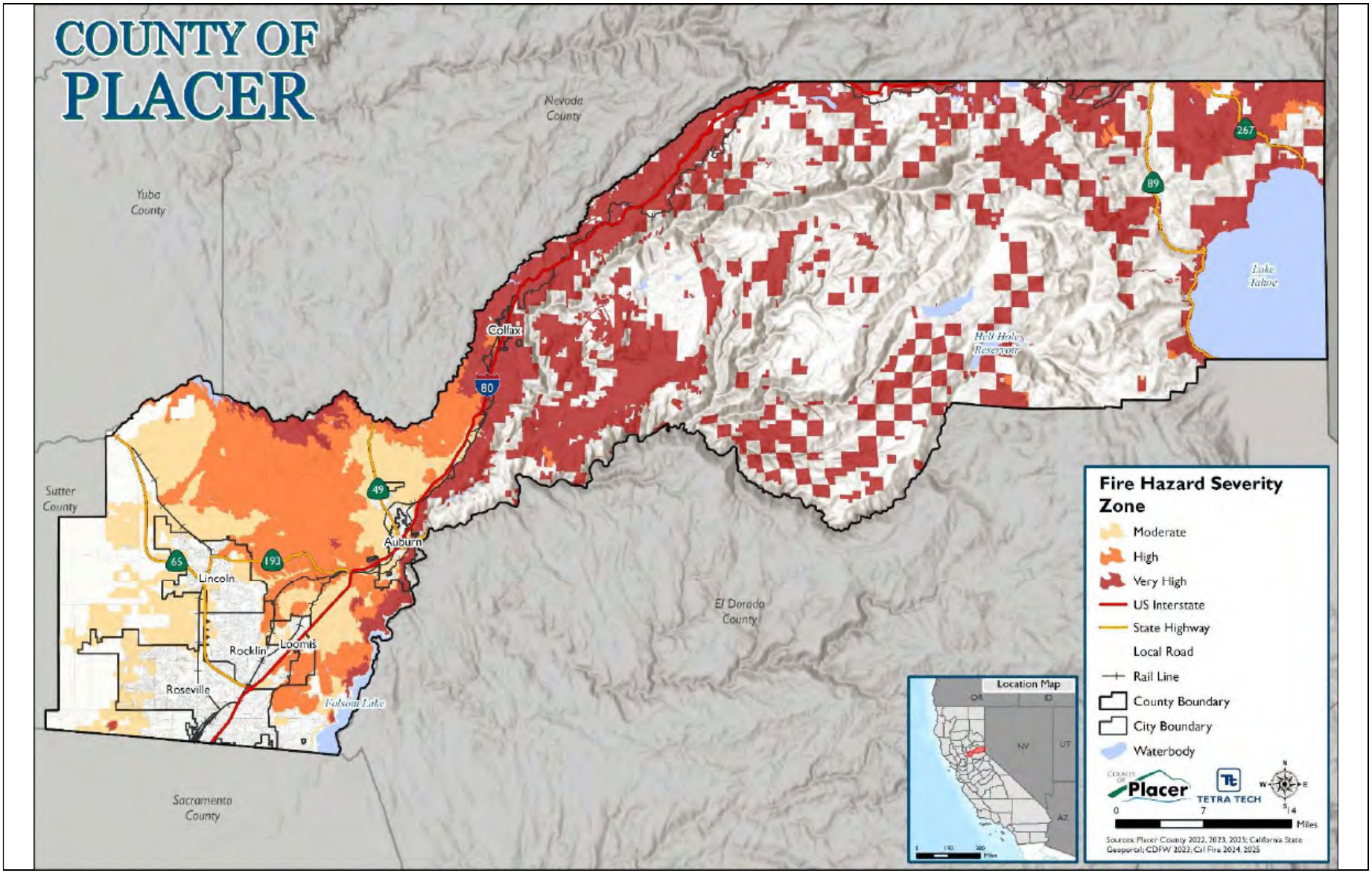


Figure 30-9. Wildfire Hazard Area



30.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of events that have impacted the overall planning area. For Placer Mosquito, there are no known past hazard events that have caused losses or damage since the last hazard mitigation plan update.

30.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Placer Mosquito reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 30-8 shows Placer Mosquito's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 30-8. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	High
Drought and Water Shortage	Low
Earthquake	Low
Flood	High
Freeze and Snow	Low
Heavy Rains and Storms	High
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	Low

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

30.7.4 Vulnerability Assessment

Table 30-9 lists issues related to the top hazards of concern for Placer Mosquito. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 30-9. Hazard Issues

Issue	Related Hazards
Limited public awareness leads to unmanaged backyard sources and low personal protection behaviors.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms
The District does not have clearly defined emergency roles, responsibilities, and information pathways.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms
Following a natural hazard event that results in standing water, mosquito-borne illness presents a threat to people in Placer County.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms
Adult mosquitoes transmit disease, and rapid response is essential when risk increases.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms
Aerial larvicide treatments enable rapid, large-scale control of mosquito larvae in habitats that are difficult or impossible for ground crews to reach.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms
There is no formal mutual aid agreement between Placer Mosquito and the California Department of Public Health, Placer County Public Health, or Placer County Agriculture.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms
Persistent standing water creates recurring mosquito production and sustained disease risk.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms

30.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 30-10 describes the potential impacts of the hazards of local concern to Placer Mosquito (hazards identified as medium or high risk in Table 30-8). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

30.7.6 Changing Conditions That May Impact Risk

Population and development changes for Placer Mosquito are consistent with those identified in Chapter 2 County of Placer. Since the previous plan was approved, booming population and development have increased the vulnerability of the District.

Table 30-10. Hazard Impacts

Hazard	Potential Impacts
Dam and Levee Failure	Structural failure can unleash extensive flooding, creating large, stagnant water zones that fuel mosquito populations and disease transmission. Rapid aerial treatments may be critical, but unclear roles and absent mutual aid agreements hinder timely action.
Flood	Floodwaters often blanket urban and rural areas, leaving widespread standing water that accelerates mosquito breeding. Low public awareness and unclear emergency protocols delay intervention, increasing reliance on aerial larviciding for hard-to-reach sites.
Heavy Rains and Storms	Intense storms leave behind persistent water in yards, parks, and natural habitats, sustaining mosquito production. Unmanaged backyard sources and slow operational mobilization amplify risk, making aerial treatments essential for inaccessible areas.
Wildfire	Unmanaged vegetation and limited public awareness heighten wildfire ignition and spread, while smoke exposure poses health threats. Gaps in emergency roles and lack of mutual aid agreements impede coordinated response, prolonging recovery and compounding public health impacts.

30.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

30.8.1 Changes in Community Priorities

The District prioritizes protecting public health by reducing the risk of vector-borne diseases through proactive prevention, rapid response, and effective communication. Its focus includes strengthening emergency coordination, enhancing public awareness, improving surveillance and testing capabilities, and deploying large-scale control measures when necessary. By investing in source reduction, drainage improvements, and integrated mitigation strategies, the District aims to build a resilient community prepared to manage evolving vector threats.

30.8.2 Past Mitigation Action Status

Placer Mosquito did not participate in the 2021 LHMP, there are no previously identified mitigation actions to report on in this update. Accordingly, this plan focuses solely on newly developed actions based on current assessments of hazards, vulnerabilities, and community needs.

30.8.3 Hazards Omitted from Mitigation Strategy

Placer Mosquito is a very focused agency whose core mission is to manage vector populations and risk of vector-borne disease transmission. The District does not have the capacity to design an all-hazards mitigation program, nor is it in their mission. The District chose to focus their mitigation strategy on the natural hazards that would result in standing water in Placer County that could result in increased mosquito populations—avalanche, dam and levee failure, flood, and heavy rains and storms. All other hazards were omitted from their mitigation strategy.

30.8.4 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Placer Mosquito would like to pursue in the future to reduce the risk from hazards.

Table 30-11 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 30-11. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	X	X	-	X
Dam and Levee Failure	X	X	-	X
Drought and Water Shortage	-	-	-	-
Earthquake	-	-	-	-
Flood	X	X	-	X
Freeze and Snow	-	-	-	-
Heavy Rains and Storms	X	X	-	X
High Winds and Tornadoes	-	-	-	-
Landslides, Mudslides, and Debris Flows	-	-	-	-
Wildfire	-	-	-	-

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 30-12 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 30-12. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
Placer Mosquito-01	Vector Safe Placer	6	1-5 Years	Medium	Low	8.5	High
Placer Mosquito-02	Communication Plan	6	1-5 Years	Medium	Low	8.5	High
Placer Mosquito-03	Vector and Disease Testing Plan	5	1-5 Years	High	Medium	8.25	High
Placer Mosquito-04	Aerial Adulticide Mitigation Plan	5	1-5 Years	High	High	7.25	Medium
Placer Mosquito-05	Aerial Larvicide Mitigation Plan	5	1-5 Years	High	High	7.25	Medium
Placer Mosquito-06	Project Vector Shield	6	1-10 Years	High	High	6.5	Medium
Placer Mosquito-07	Source Reduction and Drainage Improvements	5	1-10 Years	Medium	Medium	6.25	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

30.8.5 Mitigation Strategy

Table 30-13 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The Placer Mosquito General Manager will lead implementation of all projects listed. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

It is noted that the core mission of Placer Mosquito is to prevent and mitigate vector-borne disease. The main hazard that facilitates vector-borne disease is standing water. The hazards identified in the table below were chosen for their potential to leave standing water and increase the risk of vector-borne disease.

Table 30-13. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
Placer Mosquito-01	Vector Safe Placer	Develop and maintain a coordinated, multi-lingual outreach program on mosquito-borne disease prevention, source reduction, and seasonal risk messaging, including web, social media, schools, and community partners.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	Placer County	Placer Mosquito budget
Placer Mosquito-02	Communication Plan	Develop and implement a Placer Mosquito and Vector Control District Communication Plan. An internal communication plan for Placer Mosquito during non-emergency times will better prepare the district by establishing clear roles, responsibilities, and information pathways prior to an emergency.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	Placer County Office of Emergency Services	Placer Mosquito budget
Placer Mosquito-03	Vector and Disease Testing Plan	Vector and disease testing provides early detection and continuous monitoring of mosquito-borne threats, allowing the District to act before risks escalate. Surveillance data show where and when vectors or pathogens are present, enabling targeted control and reducing human disease risk.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	Placer County	Placer Mosquito budget, emergency public health funds, FEMA Hazard Mitigation Grant Program, state emergency funds
Placer Mosquito-04	Aerial Adulticide Mitigation Plan	Establish or discuss aerial adulticide contracts to enable rapid, large-scale treatment during elevated disease risk. An aerial application contract would allow the District to respond faster while covering more acreage than ground operations. Aerial treatments provide greater speed, reach, and access to habitats that ground equipment cannot effectively reach.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	Placer County	Placer Mosquito budget, emergency public health funds, FEMA HMA, state emergency funds

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
Placer Mosquito-05	Aerial Larvicide Mitigation Plan	Establish aerial larvicide contracts to enable rapid, large-scale treatment during elevated disease risk. By reducing larvae before they become adult mosquitoes, aerial larviciding helps lower overall mosquito populations and decreases the risk of disease transmission.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	Placer County	Placer Mosquito budget, emergency public health funds, FEMA HMA, state emergency funds
Placer Mosquito-06	Project Vector Shield	Formalize mutual aid and data-sharing agreements between Placer Mosquito, Placer County Public Health, Placer County Agriculture, Placer County Office of Emergency Services, and California Department of Public Health to coordinate surveillance, messaging, and response during vector-borne disease events. Shared data, resources, and expertise improve early detection, streamline communication, and support rapid, unified action during disease outbreaks or emerging vector threats.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	California Department of Public Health, Placer Public Health, Placer Agriculture, Placer Office of Emergency Services	Placer Mosquito budget, emergency public health funds, FEMA Hazard Mitigation Grant Program, state emergency funds
Placer Mosquito-07	Source Reduction and Drainage Improvements	Develop and implement source reduction and drainage improvement projects in mosquito-prone areas.	Avalanche, Dam and Levee failure, Flood, Heavy Rains and Storms	Placer County	Placer Mosquito budget

31. Rocklin Unified School District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Rocklin Unified School District (Rocklin USD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Rocklin USD, describes who participated in the planning process, assesses Rocklin USD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Rocklin USD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

31.1 Hazard Mitigation Planning Team

The Rocklin USD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Rain Kernytsky, Senior Director of Facilities, Maintenance and Operations
Address: 2615 Sierra Meadows Drive, Rocklin, CA 95677
Phone Number: 916-517-7283
Email: rkernytsky@rocklinusd.org

Alternate Point of Contact: Roger Stock, Superintendent
Address: 2615 Sierra Meadows Drive, Rocklin, CA 95677
Phone Number: 916-517-7283
Email: rstock@rocklinusd.org

Maintenance and Operations represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 31-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 31-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Rain Kernytsky	Maintenance and Operations	Senior Director Of Facilities, Maintenance and Operations	All aspects
Roger Stock	District Office	Superintendent	Reviewing plan
Jennifer Stahlheber	District Office	Deputy Superintendent	Reviewing plan

31.2 Community Profile

Rocklin USD serves as a cornerstone of education in Rocklin, California, providing high-quality public K–12 instruction to approximately 11,600 students. The District is widely recognized for its strong academic performance, innovative programs, and commitment to developing well-rounded individuals through high expectations and forward-thinking approaches.

Rocklin USD offers a diverse range of educational opportunities, including International Baccalaureate (IB), Career Technical Education pathways, and specialized programs for gifted students (GATE), English Learners, and students requiring special education services. Parent and community partnerships are central to the district's success, fostering an environment of collaboration and engagement.

The District encompasses 11 elementary schools, 2 middle schools, and 3 high schools, along with charter school options, ensuring comprehensive educational coverage for families in the region. Governed by an elected Board of Trustees, Rocklin USD emphasizes transparency, community involvement, and continuous improvement to meet the evolving needs of its students and stakeholders.

31.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Rocklin USD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the County serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

31.3.1 Outreach Activities

Rocklin USD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

31.3.2 Public Feedback Integration

No public feedback was received by the District related to hazard mitigation throughout the planning process.

31.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

31.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- City of Rocklin
- Rocklin Fire Department
- Rocklin Police Department

31.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- California Office of Public School Construction
- Placer County Community Development Resource Agency

31.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around Rocklin USD and share similar hazard risks, response plans, and mutual support agreements.

- Roseville City School District
- Roseville Joint Union High School District

31.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around Foresthill USD.

- Pacific Gas & Electric
- Schools Insurance Group

- Sierra College

31.4.5 Nonprofit Organizations and Community-Based Organizations

These nonprofit and community-based organizations bring valuable local knowledge, resources, and community connections to the MJHMP process. Their engagement ensures that the perspectives of underserved populations, culturally significant lands, and hazard-prone communities are meaningfully incorporated into the planning effort.

- American Red Cross
- Boys and Girls Club of Placer County

31.5 Jurisdictional Capability Assessment

Rocklin USD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer to identify opportunities for integrating mitigation concepts into ongoing County procedures.

As a special district, Rocklin USD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore,

assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

31.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 31-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 31-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code Title 24, Part 2 January 1, 2026	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
Stormwater Management Code or Program	The District complies with the City of Rocklin stormwater management program.	Work under the City of Rocklin SWPPP Program to manage BMPs	Facilities and Maintenance

31.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 31-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 31-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Emergency Operations Plan	The District has an emergency operations plan that does not address specific hazards.	Evaluate and update annually to ensure current comprehensive school site safety response plan	District Safety Committee

As a first-time participant in the MJHMP, the District plans are not currently integrated with the MJHMP. However, the District has plans in place that address safety and hazard mitigation, as described in the second column above. As these local plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

31.5.3 Development and Permitting Capability

Rocklin USD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

31.5.4 Administrative Capability

Table 31-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 31-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Board of Trustees	The Board could endorse hazard mitigation projects.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Dedicated staff that manages the landscape at each school which includes oversight and maintenance of storm water D.I.s and periodic tree maintenance as needed. There are no current plans to expand staffing from its current level.

31.5.5 Technical Capability

Table 31-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 31-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Staff that work with socially vulnerable populations or underserved communities	School site counselors work with students and families to help provide them essential services as needed.

31.5.6 Fiscal Capabilities

Table 31-6 summarizes financial resources available to Rocklin USD.

Table 31-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Dedicated Roof repair/replacement fund for roofs before they fail and cause building damage.
Impact fees for homebuyers or developers of new development/homes	New home developer fees are used to provide new classrooms/ a new school to accommodate student growth in the school district.

31.5.7 Education and Outreach Capability

Table 31-7 summarizes the education and outreach resources available to Rocklin USD.

Table 31-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	The District has a communications and community engagement officer that crafts and provides key information to community parents and staff.
Personnel skilled or trained in website development	IT Department has the ability to modify the website as needed to communicate specific messages to the parent community.
Natural disaster/safety programs in place for schools	School site Safety oversight committee that is composed of school site leadership, staff and parents. They evaluate, develop and modify safety responses to natural disasters and safety issues.

31.5.8 Community Classifications

Rocklin USD does not have any formal classifications for community programs.

31.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 31-8 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 31-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Wildfire	Weak

31.6 National Flood Insurance Program

Rocklin Unified is a school district for the City of Rocklin. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the City of Rocklin assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for the City of Rocklin.

31.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

31.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 31-1 through Figure 31-4**.** These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which the District has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 31-1. Flood Hazard Area

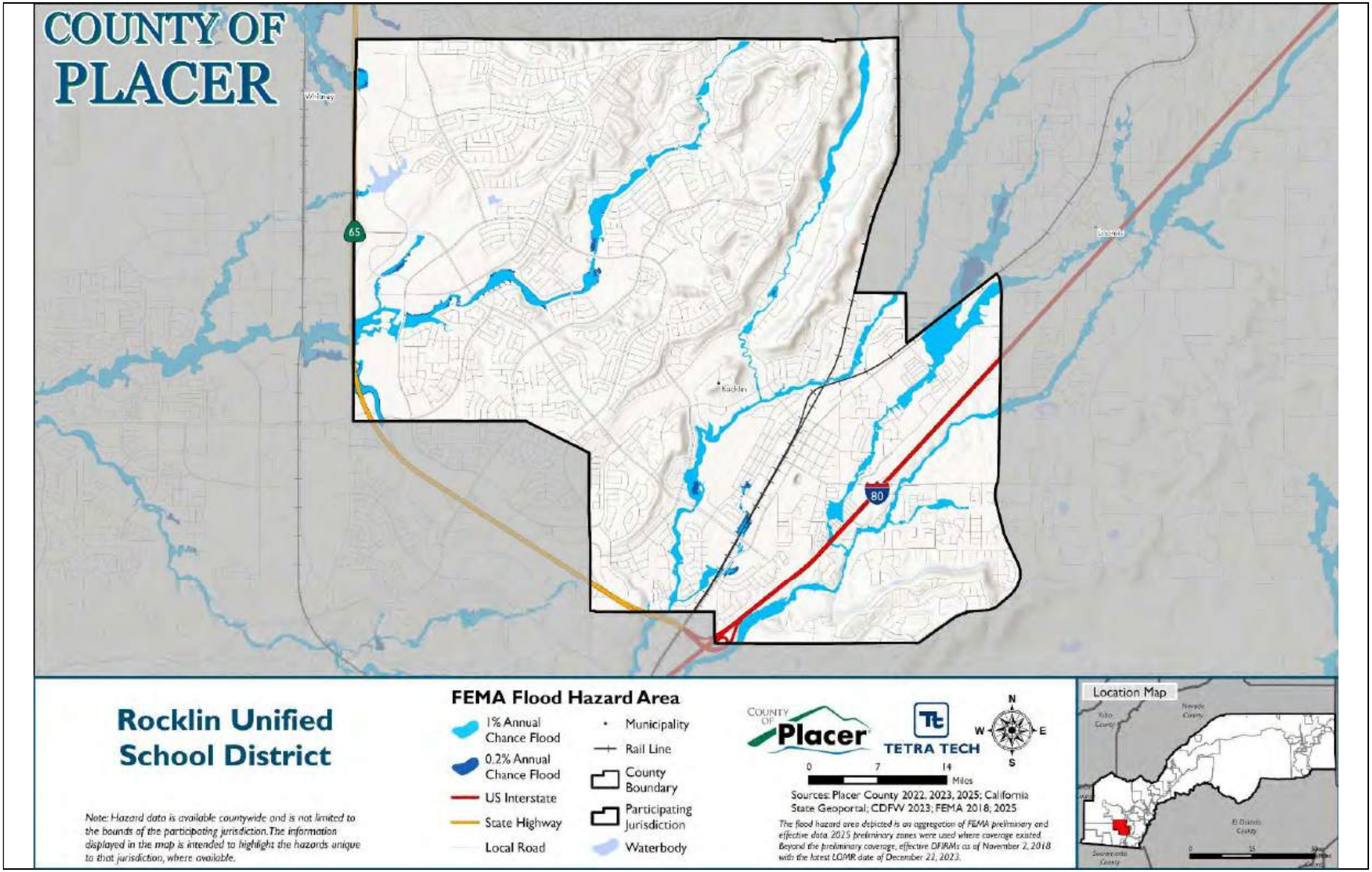


Figure 31-2. Landslide Hazard Area

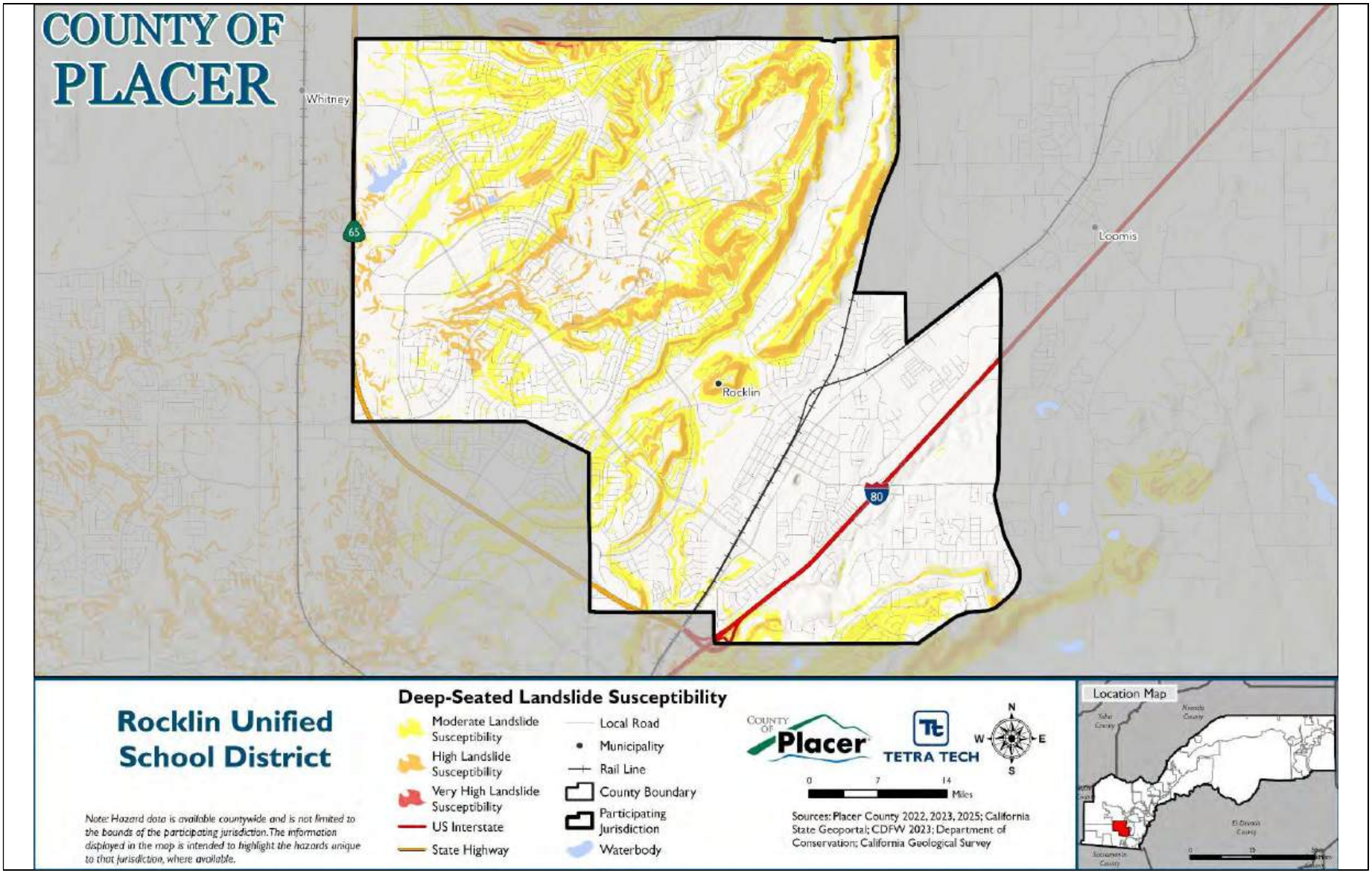


Figure 31-3. NEHRP Hazard Area

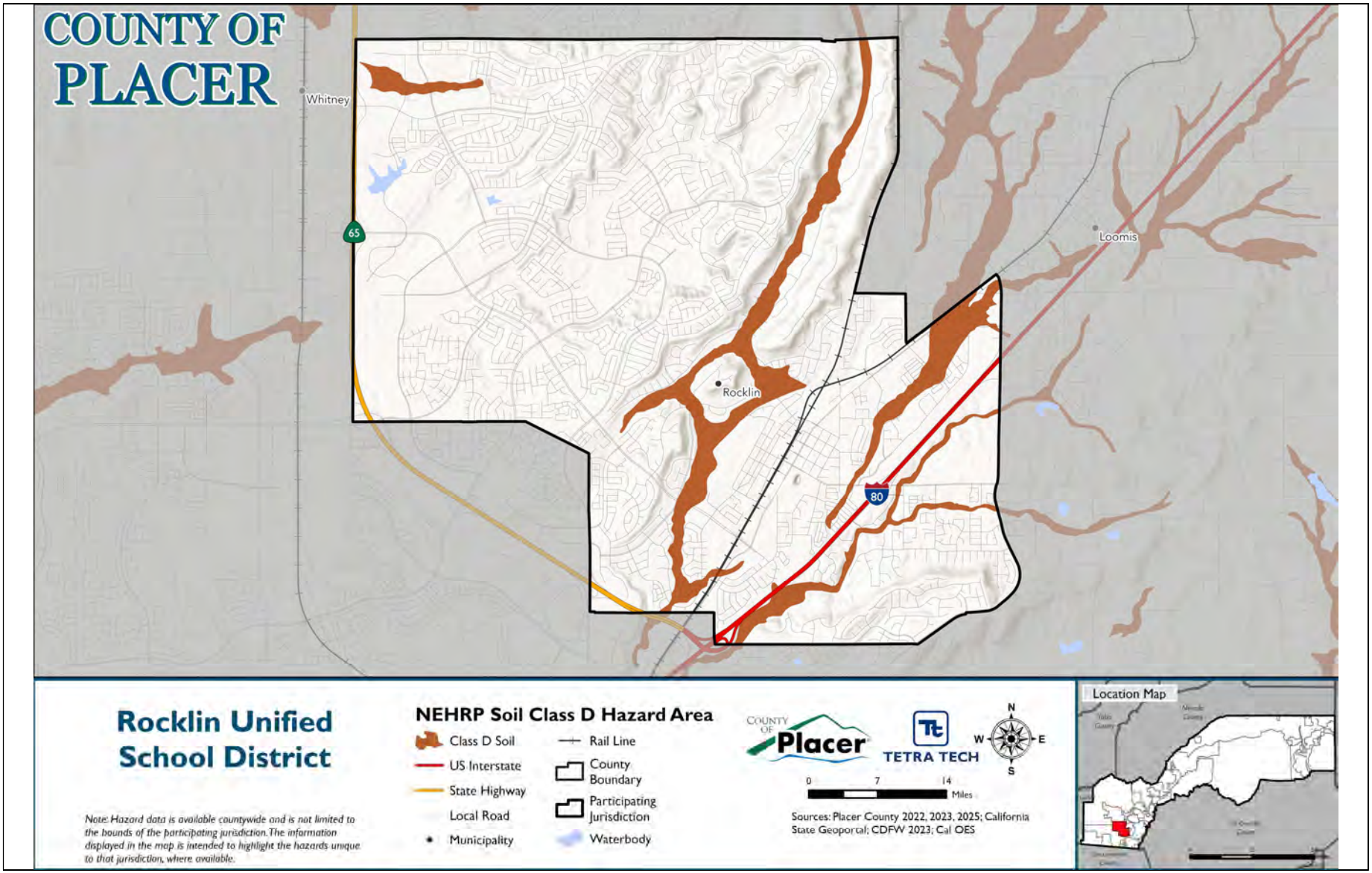
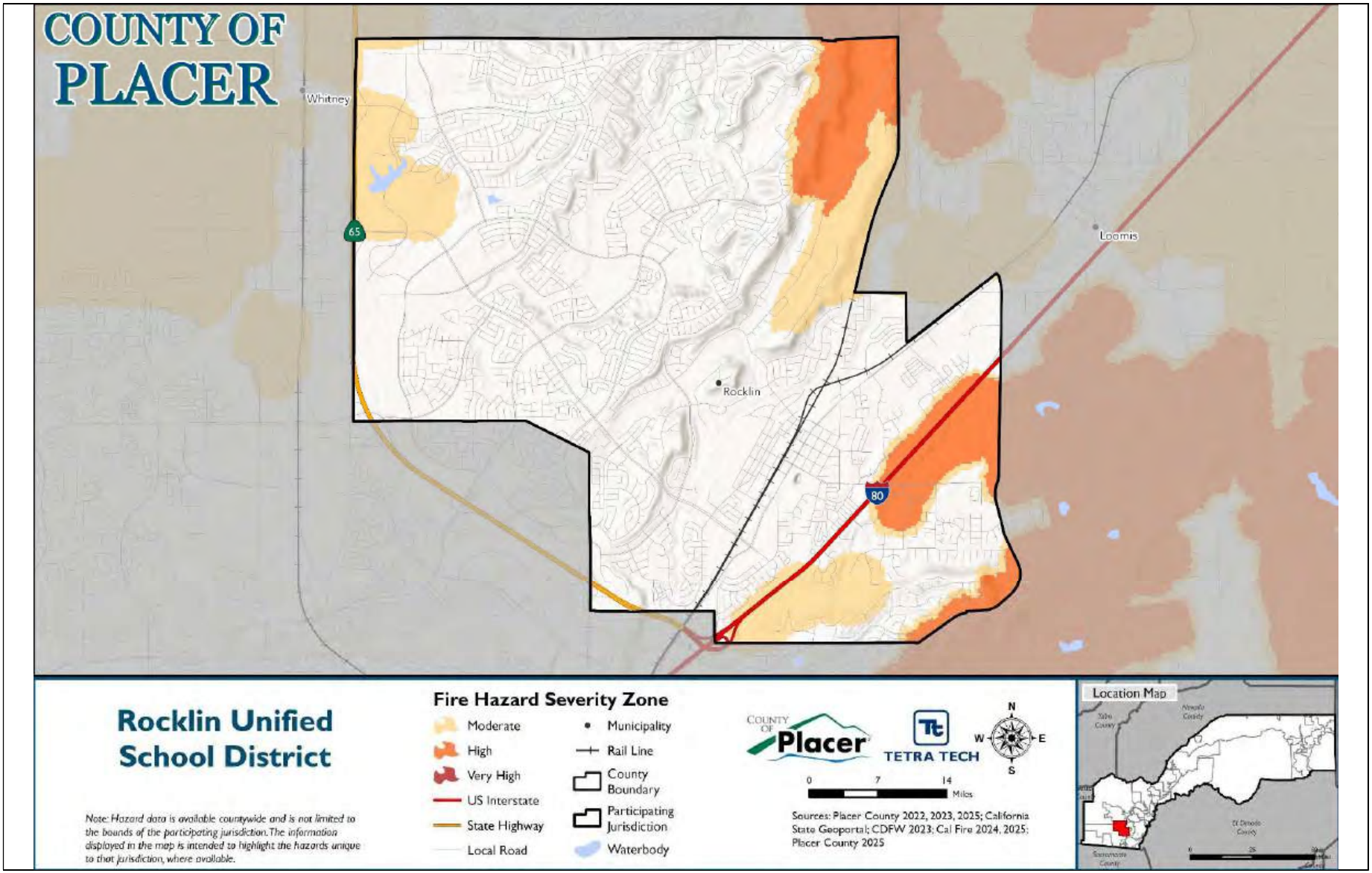


Figure 31-4. Wildfire Hazard Area



31.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 31-9 provides details on loss and damage in Rocklin USD during hazard events since the last hazard mitigation plan update.

Table 31-9. Hazard Event History in Rocklin USD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Jurisdiction experienced multiple facility roof repairs due to rain and wind events. Multiple large trees came down, some impacting buildings, necessitating repair. Many hours of overtime labor were granted to mitigate storm damage, repairing buildings and removing downed trees.
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	Jurisdiction experienced multiple facility roof repairs due to rain and wind events. Multiple large trees came down, some impacting buildings, necessitating repair. Many hours of overtime labor were granted to mitigate storm damage, repairing buildings and removing downed trees.

31.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking

process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Rocklin USD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 31-10 shows Rocklin USD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the County; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 31-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	Medium

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

31.7.4 Vulnerability Assessment

Table 31-11 lists issues related to the top hazards of concern for the District. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 31-11. Hazard Issues

Issue	Related Hazard
School buildings and structures are at risk from wildfire closures, which would disrupt learning for students.	Wildfire

31.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 31-12 describes the potential impacts of the hazards of local concern to Rocklin USD (hazards identified as medium or high risk in Table 31-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 31-12. Hazard Impacts

Hazard	Potential Impacts
Wildfire	Wildfires pose a significant risk to school buildings and related structures, potentially leading to temporary or prolonged closures. Such disruptions can interrupt educational activities, limit access to essential resources, and negatively affect student learning and well-being.

31.7.6 Changing Conditions That May Impact Risk

Although Ackerman CSD did not participate in the previous planning cycle, changing conditions are consistent with those identified in Chapter 2 County of Placer and Chapter 6 City of Rocklin.

31.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

31.8.1 Changes in Community Priorities

Ensuring the continuity of education during hazard events is a top priority for the District. School buildings and structures must be protected from risks such as wildfire-related closures to minimize disruptions to student learning. Maintaining safe, accessible facilities is essential for supporting the academic and social well-being of the community.

31.8.2 Past Mitigation Action Status

Rocklin USD did not participate in the 2021 LHMP, there are no previously identified mitigation actions to report on in this update. Accordingly, this plan focuses solely on newly developed actions based on current assessments of hazards, vulnerabilities, and community needs.

31.8.3 Hazards Omitted from Mitigation Strategy

Rocklin USD does not have the capacity to design an all-hazards mitigation program. Therefore, the District chose to focus on mitigating only their primary local hazard of concern – wildfires. All other hazards were omitted from the mitigation strategy.

31.8.4 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Rocklin Unified School District would like to pursue in the future to reduce the risk from hazards.

Table 31-13 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 31-13. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	-	-	-
Drought and Water Shortage	-	-	-	-
Earthquake	-	-	-	-
Flood	-	-	-	-
Freeze and Snow	-	-	-	-
Heavy Rains and Storms	-	-	-	-
High Winds and Tornadoes	-	-	-	-
Landslides, Mudslides, and Debris Flows	-	-	-	-
Wildfire	-	-	X	-

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 31-14 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 31-14. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
RUSD-01	Campus Fire Mitigation	5	1-5 Years	High	Medium	8.25	High

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

31.8.5 Mitigation Strategy

The following pages list the specific plan for each mitigation action, including the project description, the specific problem being mitigated, the hazards addressed by the mitigation action, supporting agencies,

and potential sources of funding. The Rocklin USD Superintendent will lead implementation of all projects listed in Table 31-15.

Table 31-15. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
RUSD-01	Campus Fire Mitigation	Collaborate with Schools Insurance Group, Placer County Resource Conservation District and Rocklin Fire Department to ongoing and annual reduction of fuel loads around perimeters of RUSD campuses to safeguard classrooms and school structures.	Wildfire	School Insurance Group, Placer Resource Conservation District, Rocklin Fire Department	General fund and staff time

32. Roseville City School District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Roseville City School District (Roseville CSD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Roseville CSD, describes who participated in the planning process, assesses Roseville CSD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Roseville CSD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

32.1 Hazard Mitigation Planning Team

The Roseville CSD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Justin Barrett, Director of Maintenance and Facilities

Address: 1050 Main Street, Roseville, CA 95678

Phone Number: 916-782-5289

Email: jbarrett@rcsdk8.org

Alternate Point of Contact: Derk Garcia, Superintendent

Address: 1050 Main Street, Roseville, CA 95678

Phone Number: 916-771-1600, ext. 50130

Email: dgarcia@rcsdk8.org

Maintenance and Facilities represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 32-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 32-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Justin Barrett	Maintenance and Facilities	Director	Hazard data, subject-matter expertise, worksheet input, hazard history information, mitigation action updates and drafting or reviewing parts of the plan.
Amy Banks	Business Services	Associate Superintendent	Review and approve jurisdictional annex of the plan.
Jessica Hull	Communications and Community Engagement	Executive Director	Community plans, subject-matter expertise, worksheet input and drafting or reviewing parts of the plan.
Rachael Peck	Educational Services	Director	Hazard data, community plans, subject-matter expertise, worksheet input, hazard history information, mitigation action updates, drafting and reviewing of plans

32.2 Community Profile

The Roseville CSD serves preschool through 8th grade students across 21 schools, supporting more than 12,500 students and employing over 1,400 staff. For more than 150 years, the district has provided educational services to the community, with a focus on fostering academic, social, and emotional growth for all students.

32.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Roseville CSD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the County serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

32.3.1 Outreach Activities

Roseville CSD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District posted MJHMP information on their website to promote the planning process to their staff and families of students. To amplify MJHMP promotion, the City of Roseville posted the links to the project website and public hazard mitigation public survey on their social media pages. In addition, the District posted MJHMP materials on their public notice bulletin board and on the front door of their administrative offices. These outreach efforts are show in Figure 32-1 through Figure 32-3.

Figure 32-1. Website – Public Outreach

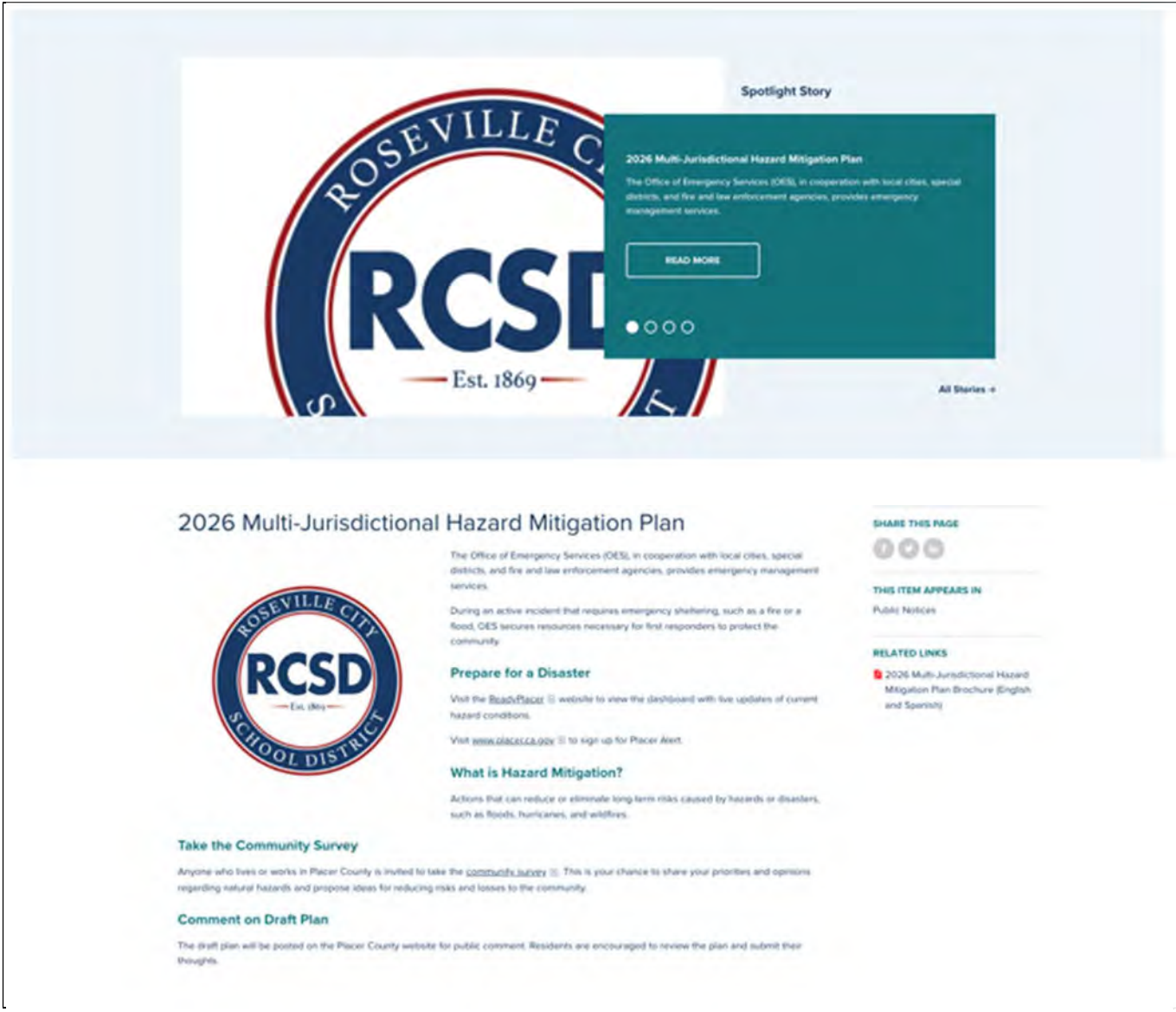


Figure 32-2. Social Media - Public Outreach Activities

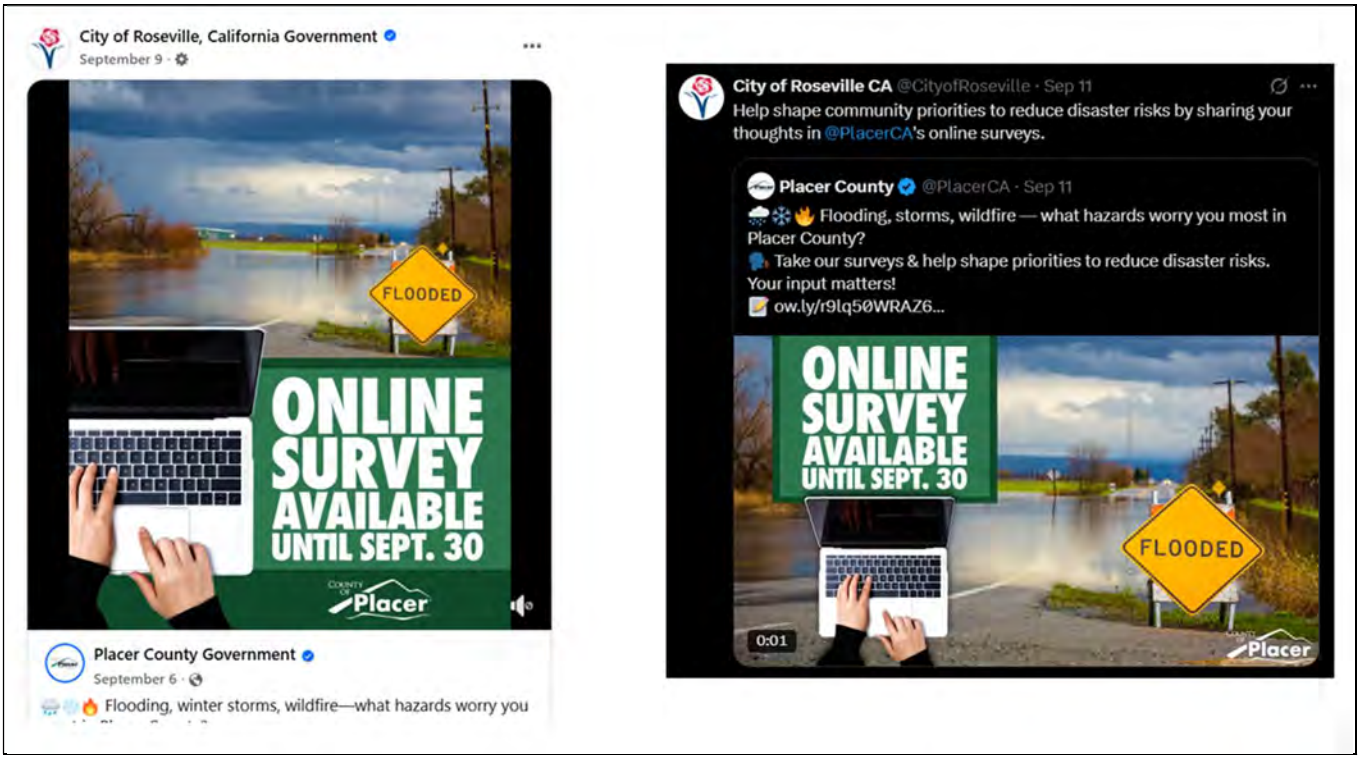


Figure 32-3. Flyers

32.3.2 Public Feedback Integration

While 22 of the 298 hazard mitigation public survey respondents noted that they live in the City of Roseville, they are not necessarily connected to RCSD. However, the results are included here as the City of Roseville is not a participant in this plan. Of the 22 respondents, three indicated that they live in a floodplain; two did not have flood insurance and one was unsure if they had flood insurance. When asked about potential regulatory mitigation measures, the majority indicated that they supported policies that prohibit development in areas subject to natural hazards and safeguard the local economy following a disaster. Key vulnerabilities reported by the public included overgrown vegetation, falling trees, Folsom Dam failure inundation, and unknown evacuation routes.

RCSD did not receive additional public feedback about the MJHMP.

32.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

32.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- City of Roseville Office of Emergency Services
- Placer County Department of Education
- Sacramento County Office of Emergency Services

32.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- California Office of Public School Construction
- City of Roseville Planning Department
- Placer County Community Development Resource Agency

32.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around RCSD and share similar hazard risks, response plans, and mutual support agreements.

- Rocklin Unified School District
- Roseville Joint Union High School District

32.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around RCSD.

- Greater Sacramento Economic Council
- Pacific Gas & Electric
- Roseville Chamber of Commerce
- Sacramento Municipal Utility District
- Schools Insurance Group

32.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around RCSD.

- American Red Cross
- Boys and Girls Club of Placer County
- KidsFirst

32.5 Jurisdictional Capability Assessment

Roseville CSD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy

documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for RCSD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Roseville CSD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

32.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 32-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 32-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code Title 24, Part 2 January 1, 2026	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

32.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 32-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 32-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Facilities Master Plan, Last Updated October 2024	Provides authorized yearly funding approved by the Board of Education	Creek maintenance on both banks of Cirby Creek within the property lines of Warren T. Eich Middle School	Maintenance and Facilities
Emergency Operations Plan	Provides guideline for all potential school site emergencies that is consistent across all schools	Evaluate and update annually to ensure current comprehensive school site safety response plan	Safety Manager
City of Roseville Stormwater Pollution Prevention Plan	The District complies with the citywide plan to prevent stormwater pollution by using the Best Management Practices to manage and prevent any illicit discharges to the stormwater system.	The District does not have the ability to expand or improve this capability.	Maintenance and Facilities

As a first-time participant in the MJHMP, the District plans are not currently integrated with the MJHMP. However, the District has plans in place that address safety and hazard mitigation, as described in the second column above. As these local plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

32.5.3 Development and Permitting Capability

Roseville CSD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County or the City of Roseville.

32.5.4 Administrative Capability

Table 32-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 32-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Board of Trustees	The Board could endorse hazard mitigation projects.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Dedicated staff that manages the landscape at each school which includes oversight and maintenance of storm water D.I.s and periodic tree maintenance as needed. There are no current plans to expand staffing from its current level.

32.5.5 Technical Capability

Table 32-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 32-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Staff that work with socially vulnerable populations or underserved communities	School site counselors work with students and families to help provide them essential services as needed.

32.5.6 Fiscal Capabilities

Table 32-6 summarizes financial resources available to Roseville CSD.

Table 32-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Dedicated Roof repair/replacement fund for roofs before they fail and cause building damage.
Impact fees for homebuyers or developers of new development/homes	New home developer fees are used to provide new classrooms/ a new school to accommodate student growth in the school district.
Incur debt through general obligation bonds	Can be used to generate a new source of funding to modernize existing or build new school buildings.

32.5.7 Education and Outreach Capability

Table 32-7 summarizes the education and outreach resources available to RCSD.

Table 32-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	The District has a communications and community engagement officer that crafts and provides key information to community parents and staff.
Personnel skilled or trained in website development	The IT Department has the ability to modify the website as needed to communicate specific messages to the parent community.
Natural disaster/safety programs in place for schools	School Site Safety oversight committee that is composed of school site leadership, staff and parents. They evaluate, develop and modify safety responses to natural disasters and safety issues.

32.5.8 Community Classifications

Roseville CSD does not currently maintain formal classifications for its community programs.

32.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 32-8 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 32-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Moderate - Preventative Creek Maintenance in place
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Moderate - Preventative Tree and Creek Maintenance in place
High Winds and Tornadoes	Moderate - Preventative Tree and Creek Maintenance in place. Active roof replacement plan with ongoing funding source
Wildfire	Weak

32.6 National Flood Insurance Program

Roseville City is a school district for Placer County and the City of Roseville. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were

included in the Placer County or City of Roseville assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County or in the City of Roseville Hazard Mitigation Plan.

32.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

32.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 32-4 through Figure 32-8**.** These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which the District has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 32-4. Dam Inundation Hazard Area

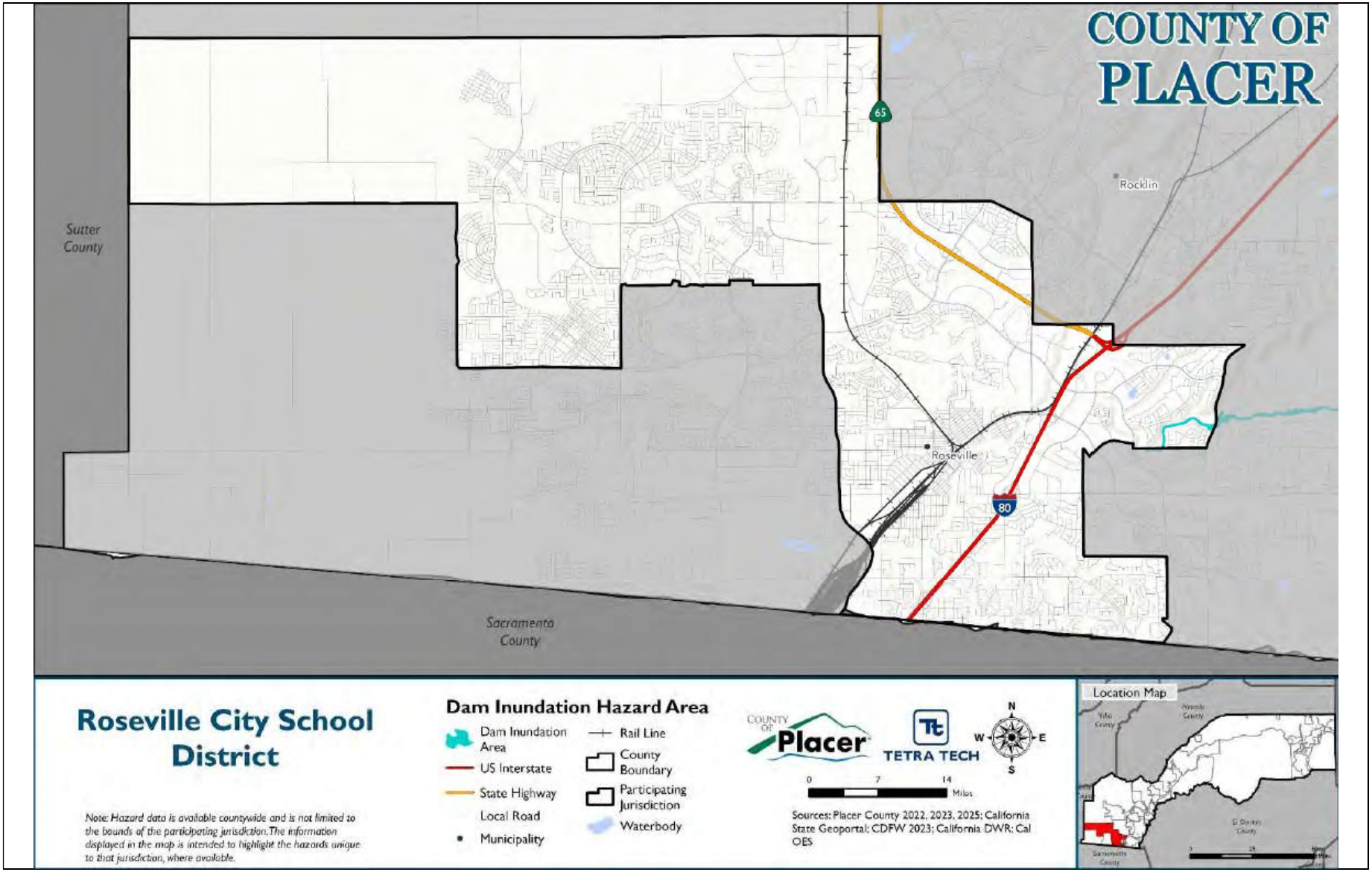


Figure 32-5. Flood Hazard Area

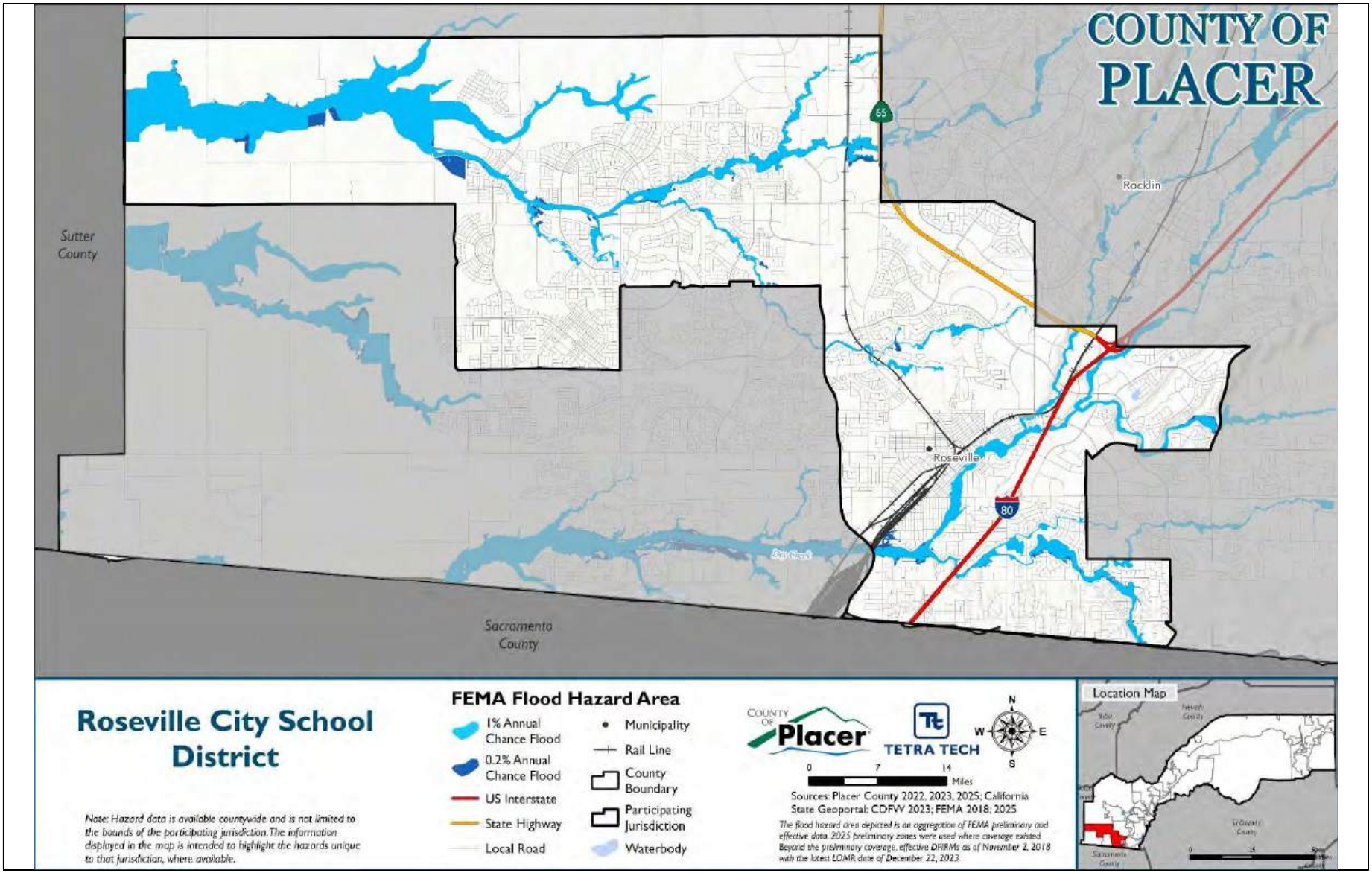


Figure 32-6. Landslide Hazard Area

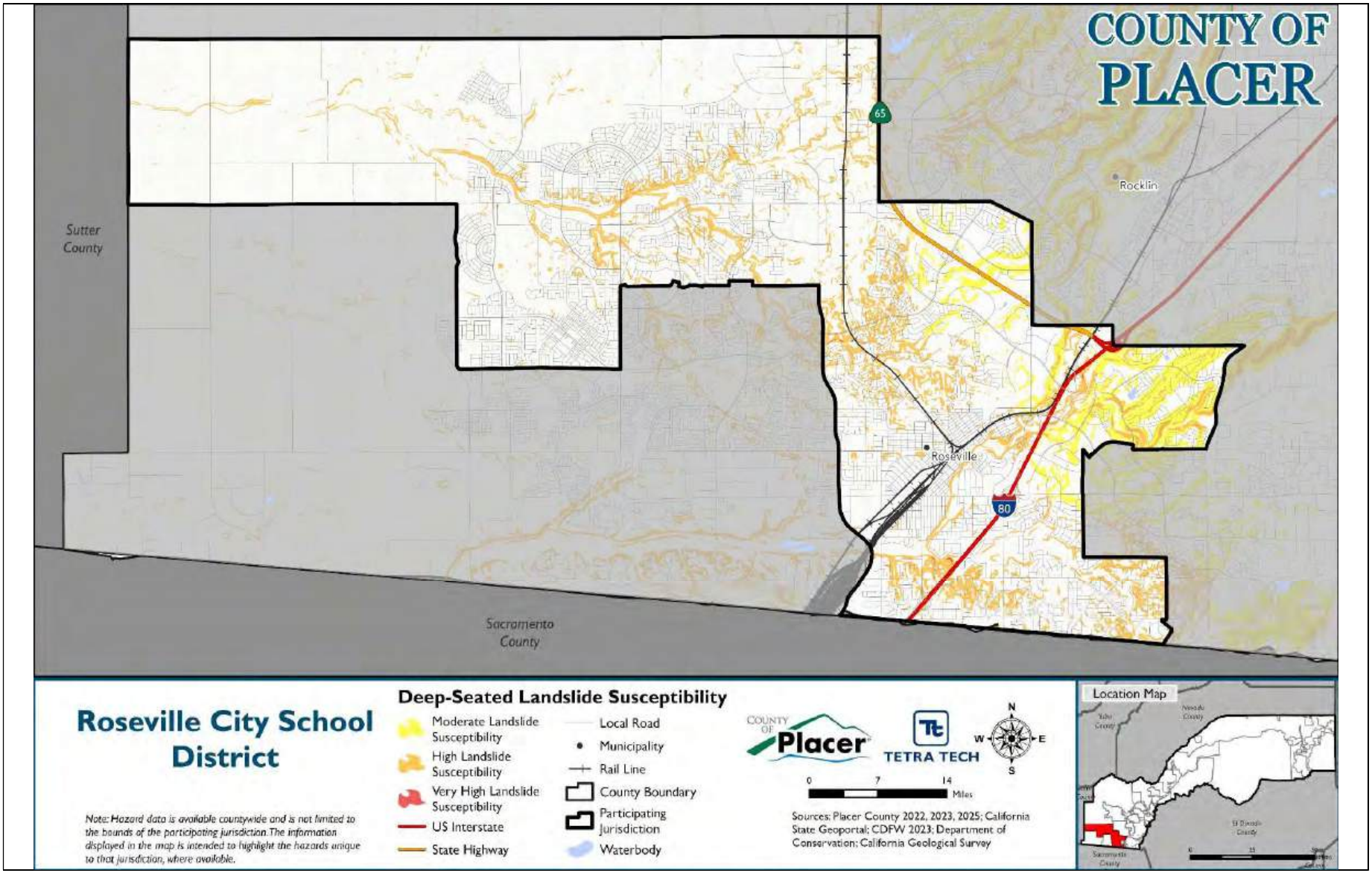


Figure 32-7. NEHRP Soil Class D Hazard Area

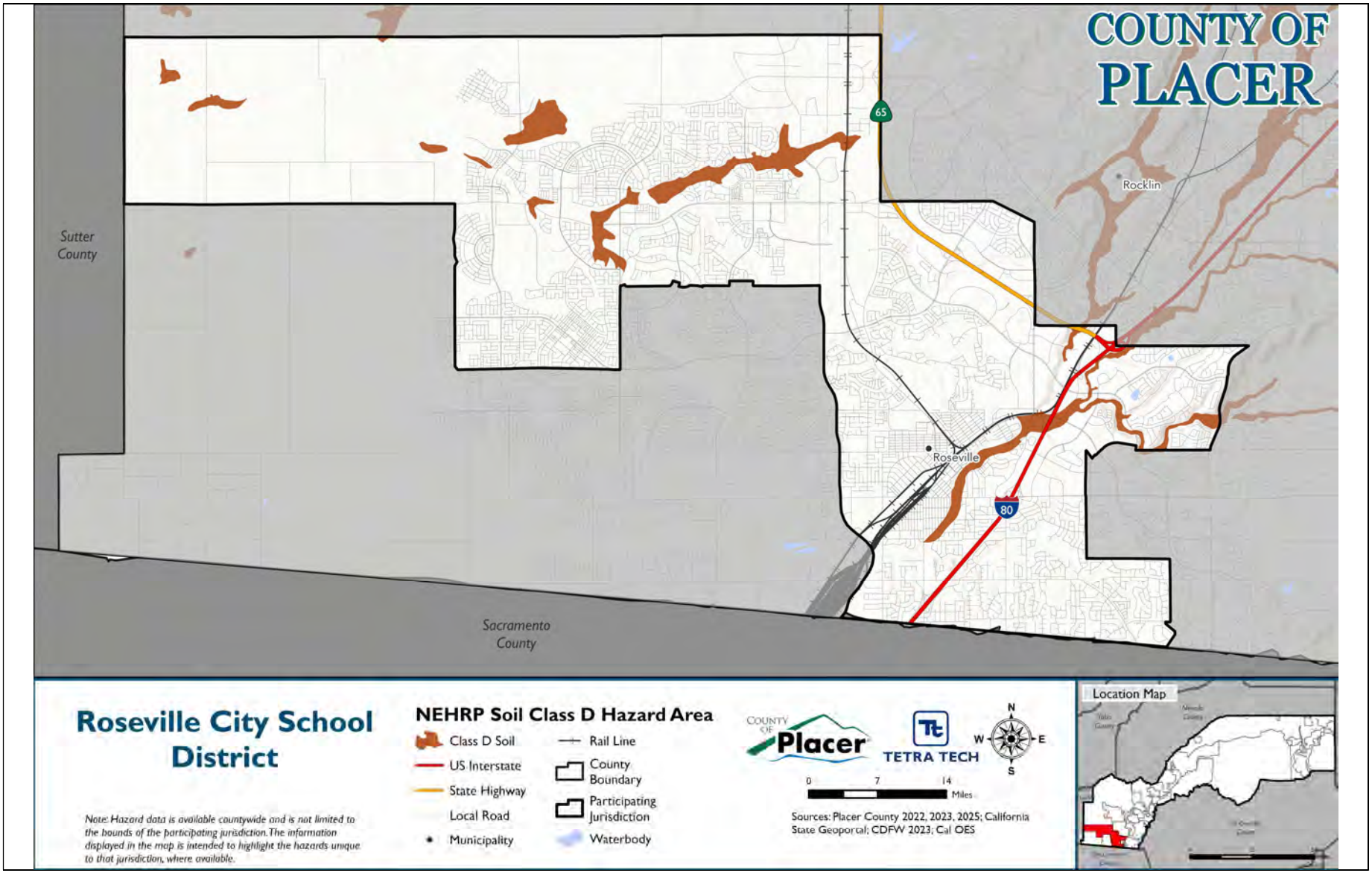
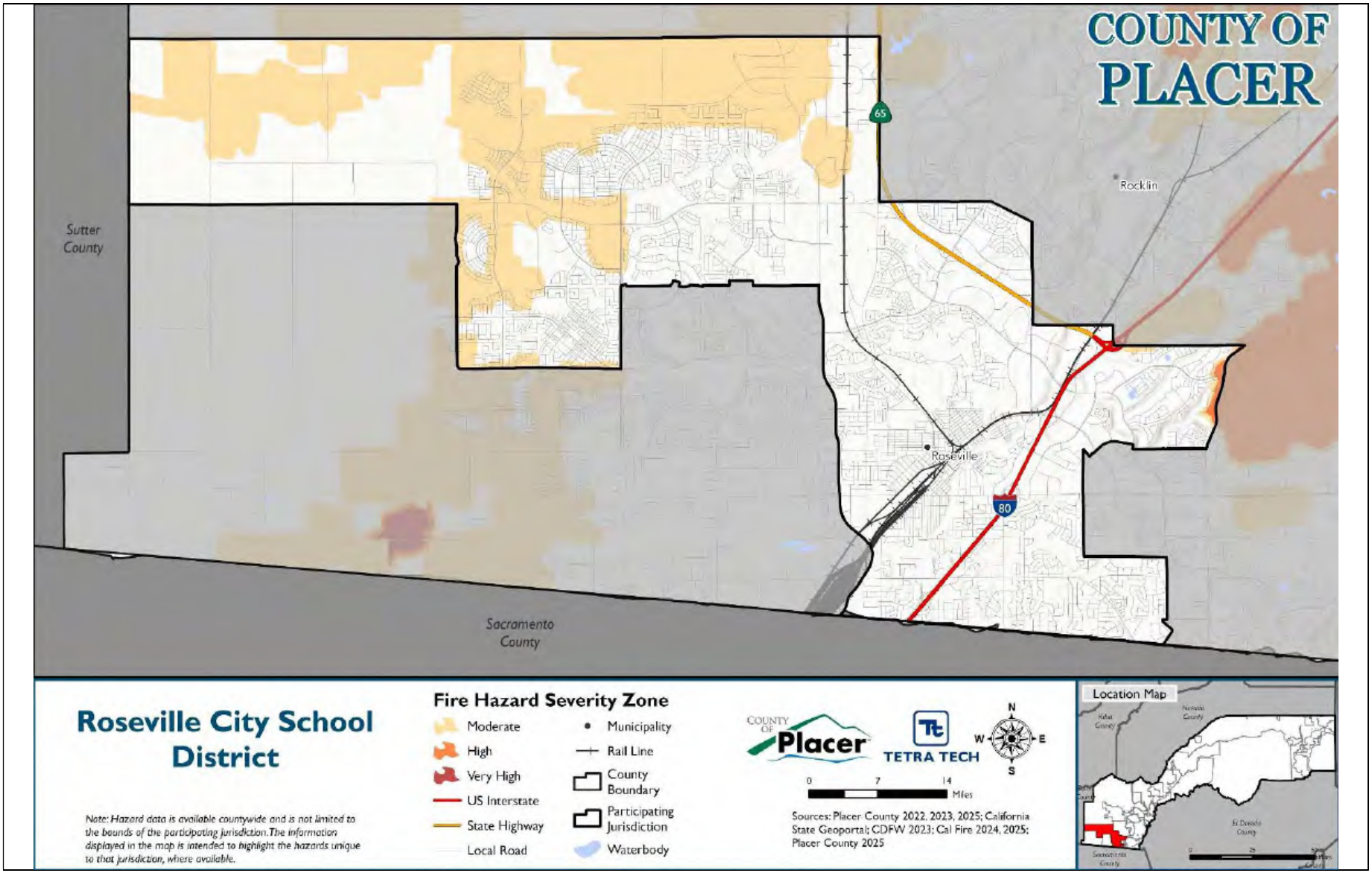


Figure 32-8. Wildfire Hazard Area



32.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 32-9 provides details on loss and damage in Roseville CSD during hazard events since the last hazard mitigation plan update.

Table 32-9. Hazard Event History in Roseville CSD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
September 7, 2022	September 30, 2022	Wildfire	The Mosquito Fire began in Placer County 4 miles east of Foresthill near Mosquito Ridge Road, CA, and close to Oxbow Reservoir the evening of September 6, 2022, at 6:27 PM PDT and later spread into El Dorado County. Extreme fire behavior was observed due to the very dry humidity and fuels, with the fire developing large plumes that radar indicated extended up to 40,000 feet. In the first few days, the fire saw rapid growth at 5,705 acres by 7 pm PDT on the 7th and 13,705 acres by 8 pm PDT on the 8th. More than 11,000 people were evacuated and 9,000 structures were threatened. The fire included areas in both the Tahoe and Eldorado National Forests. The fire burned a total of 76,788 acres and caused road closures throughout the area. There were 2 firefighters injured during the fire. A total of 78 structures were destroyed and an additional 13 buildings were damaged in the towns of Foresthill, Volcanoville, and Michigan Bar. Periods of moderate to heavy rain from September 18-21 largely halted fire growth, but the fire was not considered fully contained until October 22.	All schools were closed for one day due to the impact of the smoke. District made up the day at the end of the school year.
January 31, 2024	January 31, 2024	Strong Wind	An active weather pattern brought gusty winds with downed trees, heavy rain and mountain snow with mountain travel delays and chain restrictions, and isolated thunderstorms to end the month of January, and continued into early February. California Highway Patrol reported multiple large branches down on eastbound Interstate-80. They also reported a tree down, blocking the road at Courtland Road and Morse Road. Auburn Municipal Airport reported a max gust of 41 mph.	Eich Middle School experienced a large limb from a tree coming down a portable building roof and fencing which were both severely damaged. Fence repair cost was $3,100 Portable building was damaged beyond reasonable cost to repair so it was demolished.

32.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts

of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Roseville CSD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 32-10 shows Roseville CSD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 32-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	Low

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

32.7.4 Vulnerability Assessment

Table 32-11 lists issues related to the top hazards of concern for the District. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 32-11. Hazard Issues

Issue	Related Hazard
Some school sites have large undeveloped natural landscape that needs routine preventative maintenance to maintain a safe and fire resistant status.	Wildfire, Flood, Heavy Rains and Storms
Students, families, and staff are unaware of the natural hazards that pose a risk to Roseville CSD facilities.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire
Current Cirby Creek floodplain plans encroaches on Eich Middle School property using the large sod play areas and asphalt areas as overflow retention areas until creek waters subside. No buildings are in the flood zone but use of outdoor areas will be impacted. Exploring retention walls being placed along the creek or diversion of overflow water to other areas in the City where there is open space.	Dam and Levee Failure, Flood, Heavy Rains and Storms
Existing HVAC units are not operating at a capacity sufficient to filter wildfire smoke and are not hardened against extreme temperature events.	Freeze and Snow, Wildfire

32.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 32-12 this section describes the potential impacts of the hazards of local concern to RCSD (hazards identified as medium or high risk in Table 32-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 32-12. Hazard Impacts

Hazard	Potential Impacts
Landslides, Mudslides, and Debris Flow	A landslide, mudslide, or debris flow could block roads, damage facilities and equipment, or endanger lives. Buljan Middle School is located in the high landslide susceptibility hazard area.

32.7.6 Changing Conditions That May Impact Risk

Although RCSD did not participate in the previous planning cycle, changing conditions are consistent with those identified in Chapter 2 County of Placer and the 2023 City of Roseville Local Hazard Mitigation Plan.

32.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

32.8.1 Changes in Community Priorities

Although RCSD did not participate in the previous planning cycle, its priorities have remained consistent. The District continues to emphasize ongoing communication and education for community members regarding mitigation strategies.

32.8.2 Past Mitigation Action Status

Roseville CSD did not participate in the 2021 LHMP, there are no previously identified mitigation actions to report on in this update. Accordingly, this plan focuses solely on newly developed actions based on current assessments of hazards, vulnerabilities, and community needs.

32.8.3 Additional Mitigation Efforts

Although Roseville CSD did not participate in the previous LHMP update, the District has completed or made significant progress on the following other mitigation efforts:

- Reduction of dead trees and brush in and around Cirby Creek running through the Eich Middle School campus.

32.8.4 Hazards Omitted from Mitigation Strategy

The following hazards were omitted from the mitigation strategy:

- Avalanche: School District buildings are not located near mountains and snow

32.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Roseville CSD would like to pursue in the future to reduce the risk from hazards.

Table 32-13 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 32-13. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	X	-	-	X
Drought and Water Shortage	-	-	-	X
Earthquake	-	-	-	X
Flood	X	-	X	X
Freeze and Snow	-	X	-	X
Heavy Rains and Storms	X	-	X	X
High Winds and Tornadoes	-	-	-	X
Landslides, Mudslides, and Debris Flows	-	-	-	X
Wildfire	-	X	X	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 32-14 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 32-14. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
RCSD-01	Open Space Landscape Management	3	1-5 Years	Medium	Medium	6.75	Medium
RCSD-02	Public Outreach	3	1-5 Years	Low	Low	6.75	Medium
RCSD-03	Cirby Creek Floodplain Mitigation	3	1-10 Years	High	High	5.75	Low
RCSD-04	HVAC Program	3	1-10 Years	Medium	High	4.75	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

32.8.6 Mitigation Strategy

Table 32-15 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The RCSD Superintendent will lead implementation of all projects listed in Table 32-15. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 32-15. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
RCSD-01	Open Space Landscape Management	Implement a tree removal program for invasive species and dead timber that is a fire and safety hazard. Staff will evaluate school sites annually and put action plans in place.	Wildfire, Flood, Heavy Rains and Storms, Landslides Mudslides and Debris Flows	Roseville Fire Department, Placer County Fire Department, CAL FIRE	General fund and school district staff.
RCSD-02	Public Outreach	Develop a public education and awareness program for students, families, staff, and stakeholders to educate them about the risk from natural hazards on school populations and buildings. Messaging will be delivered by social media, newsletters, and flyers, and will help educate the community about ways to reduce hazard risks, such as creating defensible spaces; clearing debris that could become hazardous in fires, winds, earthquakes, or debris flows; considering flow paths of water and debris; safety during floods, etc.	Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Landslides Mudslides and Debris Flows, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Wildfire	Placer County Office of Emergency Services, Listos California	General fund and school district staff
RCSD-03	Cirby Creek Floodplain Mitigation	Coordinate with the City of Roseville to develop action items and establish mitigation measures to be put in place at Eich Middle School which is bordered by Cirby Creek. Currently, public outreach and education occurring along with exploring action items and funding resources.	Dam and Levee Failure, Flood, Heavy Rains and Storms	City of Roseville	FEMA Hazard Mitigation Grant Program
RCSD-04	HVAC Program	Expand the capacity and level of protection provided by HVAC units in District schools to meet state requirements for wildfire smoke and harden them against extreme temperatures.	Freeze and Snow, Wildfire	Roseville Fire Department	General fund and school district staff.

33. San Juan Water District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist San Juan Water District (SJWD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of SJWD, describes who participated in the planning process, assesses SJWD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Countywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to SJWD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

33.1 Hazard Mitigation Planning Team

SJWD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Tony Barela, Director of Operations

Address: 9935 Auburn-Folson Road, Granite Bay, CA 95746

Phone Number: 916-791-6939

Email: tbarela@sjwd.org

Alternate Point of Contact: Sophanra Castanar, Safety/Regulatory Compliance Coordinator

Address: 9935 Auburn-Folson Road, Granite Bay, CA 95746

Phone Number: 916-791-6947

Email: scastanar@sjwd.org

The Operations Department represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 33-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 33-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Tony Barela	Operations	Director of Operations	Attended Meetings, coordinated participation, gathered information, edited and reviewed response
Sophanra Castanar	Operations	Safety/Regulatory Compliance Coordinator	Attended Meetings, coordinated participation, gathered information, edited and reviewed response
Adam Larsen	Executive	General Manager	Researched District information and reviewed draft documents
Andrew Pierson	Engineering	Director of Engineering Services	Researched District information and reviewed draft documents
Devon Barrett	Customer Service	Customer Service Manager	Researched District information and reviewed draft documents
Donna Silva	Finance	Director of Finance & Human Resources	Researched District information and reviewed draft documents
Michael Spencer	Operations	Water Treatment Plant Manager	Researched District information and reviewed draft documents

33.2 Community Profile

SJWD is a community services district that was established in 1954 through a vote of the citizens. It was formed under Section 61000 et seq., Title 6, Division 3 of the California Government Code and Water Code Section 3000. The District delivers reliable, high-quality water service to both retail and wholesale customers in eastern Sacramento and southern Placer counties.

The organization's history traces back to the Gold Rush era, beginning in 1854 with the creation of the North Fork American River and Mining Company, later known as the North Fork Ditch Company. Today, SJWD supplies drinking water to approximately 160,000 residents within its retail and wholesale service areas. Each year, the District treats and delivers more than 65,000 acre-feet of water through roughly 218 miles of pipeline.

SJWD's retail division serves the northeast portion of Sacramento County, as well as areas of east Roseville and Granite Bay. Its wholesale customers include Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water Company, a portion of the City of Folsom (north of the American River), and, periodically, Sacramento Suburban Water District, which serves an additional 171,000 customers.

33.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the SJWD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

33.3.1 Outreach Activities

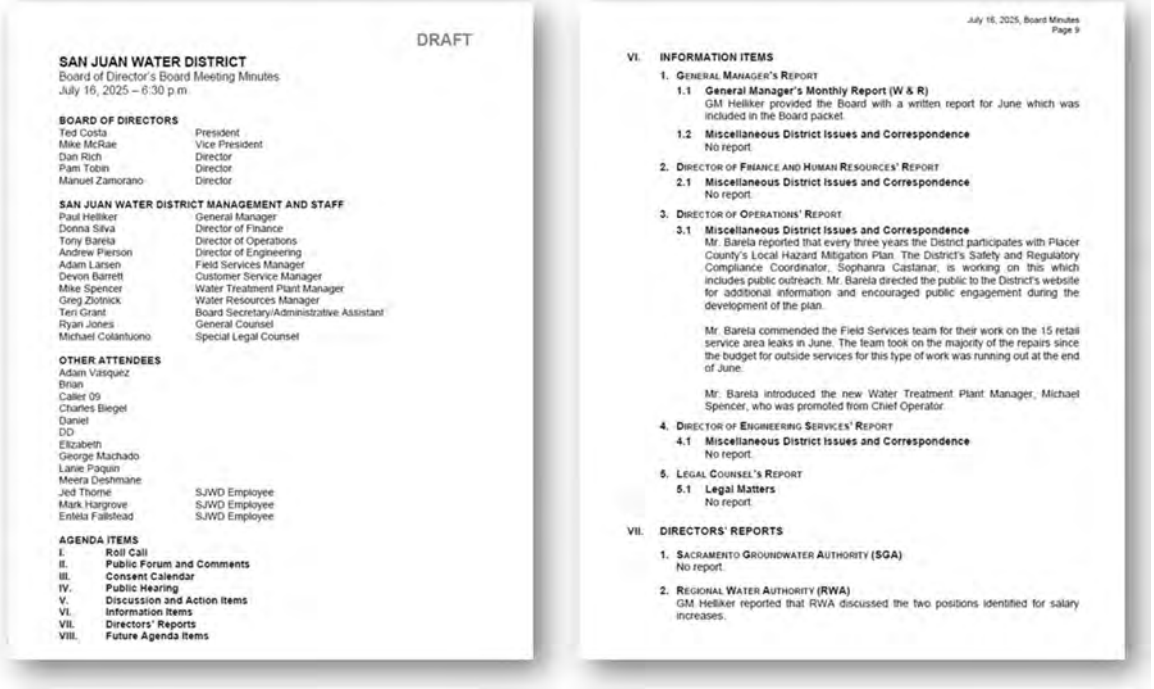
SJWD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District made MJHMP information available in the customer service area of their administrative offices beginning in July 2025. In addition, the District posted MJHMP information and links to the hazard mitigation public survey on their website. Finally, the District provided MJHMP progress updates to their Board of Directors in public meetings. Evidence of public outreach efforts is shown in Figure 33-1 through Figure 33-3.

Figure 33-1. Brochures at Customer Service Area

Figure 33-2. SJWD Website

Figure 33-3. Board Meeting Minutes



DRAFT

SAN JUAN WATER DISTRICT
Board of Director's Board Meeting Minutes
July 16, 2025 – 6:30 p.m.

BOARD OF DIRECTORS

Ted Costa	President
Mike McRae	Vice President
Dan Rich	Director
Pam Tobin	Director
Manuel Zamorano	Director

SAN JUAN WATER DISTRICT MANAGEMENT AND STAFF

Paul Helliker	General Manager
Donna Silva	Director of Finance
Tony Barela	Director of Operations
Andrew Pierson	Director of Engineering
Adam Larsen	Field Services Manager
Devon Barrett	Customer Service Manager
Mike Spencer	Water Treatment Plant Manager
Greg Zlotnick	Water Resources Manager
Teri Grant	Board Secretary/Administrative Assistant
Ryan Jones	General Counsel
Michael Colantuono	Special Legal Counsel

OTHER ATTENDEES

Adam Vasquez
Brian
Caller 09
Charles Biegel
Daniel
DD
Elizabeth
George Machado
Lanie Paquin
Meera Deshmane

Jed Thorne	SJWD Employee
Mark Hargrove	SJWD Employee
Entela Fallshead	SJWD Employee

AGENDA ITEMS

I. **Roll Call**
II. **Public Forum and Comments**
III. **Consent Calendar**
IV. **Public Hearing**
V. **Discussion and Action Items**
VI. **Information Items**
VII. **Directors' Reports**
VIII. **Future Agenda Items**

VI. **INFORMATION ITEMS**

1. **General Manager's Report**
   - 1.1 **General Manager's Monthly Report (W & R)**
     GM Helliker provided the Board with a written report for June which was included in the Board packet.
   - 1.2 **Miscellaneous District Issues and Correspondence**
     No report.
2. **Director of Finance and Human Resources' Report**
   - 2.1 **Miscellaneous District Issues and Correspondence**
     No report.
3. **Director of Operations' Report**
   - 3.1 **Miscellaneous District Issues and Correspondence**
     Mr. Barela reported that every three years the District participates with Placer County's Local Hazard Mitigation Plan. The District's Safety and Regulatory Compliance Coordinator, Sophanra Castanar, is working on this which includes public outreach. Mr. Barela directed the public to the District's website for additional information and encouraged public engagement during the development of the plan.

     Mr. Barela commended the Field Services team for their work on the 15 retail service area leaks in June. The team took on the majority of the repairs since the budget for outside services for this type of work was running out at the end of June.

     Mr. Barela introduced the new Water Treatment Plant Manager, Michael Spencer, who was promoted from Chief Operator.
4. **Director of Engineering Services' Report**
   - 4.1 **Miscellaneous District Issues and Correspondence**
     No report.
5. **Legal Counsel's Report**
   - 5.1 **Legal Matters**
     No report.

VII. **DIRECTORS' REPORTS**

1. **Sacramento Groundwater Authority (SGA)**
   No report.
2. **Regional Water Authority (RWA)**
   GM Helliker reported that RWA discussed the two positions identified for salary increases.

33.3.2 Public Feedback Integration

Public input was collected through community surveys, public meetings, and online comment forms. There was no public feedback provided.

33.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

33.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- California Division of Safety of Dams
- Placer County Environmental Health
- Placer County Office of Emergency Services
- Placer County Sheriff's Office
- Placer County Water Agency
- Sacramento Metro Fire Department
- Sacramento Office of Emergency Services
- South Placer Fire District

33.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- California Department of Water Resources
- Placer County Community Development Resource Agency
- US Army Corps of Engineers

33.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District.

- Bureau of Reclamation (Folsom Dam and Lake)
- Placer County Water Agency

- Wholesale Agency – Citrus Heights Water District
- Wholesale Agency – Orangevale Water Company
- Wholesale Agency – Fair Oaks Water District
- Wholesale Agency – City of Folsom

33.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District.

- Pacific Gas and Electric
- Roseville City School District
- Sierra College

33.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District.

- American Red Cross – Auburn Office
- Greater Auburn Area Fire Safe Council

33.5 Jurisdictional Capability Assessment

SJWD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their

progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, SJWD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the District or municipality where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

33.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 33-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 33-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Building Code **Placer County adoption of the 2022 California Building Standards Code and incorporated by reference by Placer County Code of Ordinances, Chapter 15 Building and Development (§ 15.04.220)**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Water Code **January 1, 2023**	The California Water Code establishes regulations applied to water resources and water service providers in California. Hazard mitigation is addressed in Division 3 (Dams and Reservoirs), Division 5 (Flood Control), Division 6 (Conservation, Development, and Utilization of State Water Resources), and Division 28 (Wildfire Prevention and Recovery Act of 2019).	The District does not have the authority to expand or improve state codes.	California Department of Water Resources

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Stormwater Management Code or Program **Placer County Code of Ordinances, Ch 15: Building and Development/Article 15.75.090 Stormwater management and rainwater retention.**	Governs use, protection and management of California's water resources including general state powers over water, foundational laws related to water, conservation, development and utilization, water quality, and creation, powers, and financial provisions from water providers.	The District does not have the authority to expand or improve.	California State Water Resources Control Board (SWRCB)
Flood Damage Prevention Ordinance **Placer County Code of Ordinances (§ 15.52 Flood Damage Prevention)**	Reduces flood risk to roads, culverts, and sewer infrastructure in Placer County.	The District does not have the authority to expand or improve.	Placer County

33.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 33-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 33-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Capital Improvement Plan or Program	SJWD maintains a capital improvement plan. The plan does not address natural hazards directly.	The District has the ability to expand and improve the plan.	SJWD Operations
Urban Water Management Plan	SJWD maintains an Urban Water Management Plan. The plan addresses floods and heavy rain concerns.	The District has the ability to expand and improve the plan.	SJWD Operations
Emergency Operations Plan	SJWD maintains an Emergency Operations Plan. The plan does not address natural hazards directly.	The District has the ability to expand and improve the plan.	SJWD Operations
Continuity of Operations Plan	SJWD maintains a Continuity of Operations Plan. The plan does not address natural hazards directly.	The District has the ability to expand and improve the plan.	SJWD Operations

The above plans are related to water supply and flood mitigation and are not explicitly integrated with the MJHMP. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

33.5.3 Development and Permitting Capability

SJWD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

33.5.4 Administrative Capability

Table 33-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 33-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Mutual aid agreements	SJWD has mutual aid agreements with other water agencies, including the California Water/Wastewater Agency Response Network (Cal-WARN).

33.5.5 Technical Capability

Table 33-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 33-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Planners or engineers with knowledge of land development and land management practices	Staff has some training on hazards and mitigation
Engineers or professionals trained in building or infrastructure construction practices	Staff has some training on hazards and mitigation
Planners or engineers with an understanding of natural hazards	Staff has some training on hazards and mitigation
Staff with expertise or training in benefit/cost analysis	Staff has some training on hazards and mitigation
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Staff has some training on hazards and mitigation
Staff that work with socially vulnerable populations or underserved communities	Staff has some training on hazards and mitigation
GIS Coordinator/Analyst	Staff has some training on hazards and mitigation

33.5.6 Fiscal Capabilities

Table 33-6 summarizes financial resources available to SJWD.

Table 33-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Improves infrastructure
User fees for water, sewer, gas, or electric service	Fees are set based on cost of service

Financial Resources	Description, Expansion, Improvement
Impact fees for homebuyers or developers of new development/homes	The District receives capacity fees used to expand the water system
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	The District will seek FEMA, California Department of Water Resources, Cal OES, and other funding sources to increase mitigation capabilities.

33.5.7 Education and Outreach Capability

Table 33-7 summarizes the education and outreach resources available to SJWD.

Table 33-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	General Manager is the PIO for the District
Personnel skilled or trained in website development	District staff are trained in website development.
Hazard mitigation information available on your website	Hazard mitigation is available on District website
Social media for hazard mitigation education and outreach	District's social media sites and company website will display educational information as applicable
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	District website

33.5.8 Community Classifications

SJWD does not have formal classifications for community programs.

33.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 33-8 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or

inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 33-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Moderate – The District has redundant water interties with neighboring agencies
Earthquake	Weak
Flood	Weak
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Moderate – District has generators at all pump station sites and at the WTP to manage prolonged power outages.
High Winds and Tornadoes	Weak
Wildfire	Weak

33.6 National Flood Insurance Program

SJWD is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

33.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of SJWD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

33.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 33-4 through Figure 33-8. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which SJWD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 33-4. Dam Inundation Hazard Area

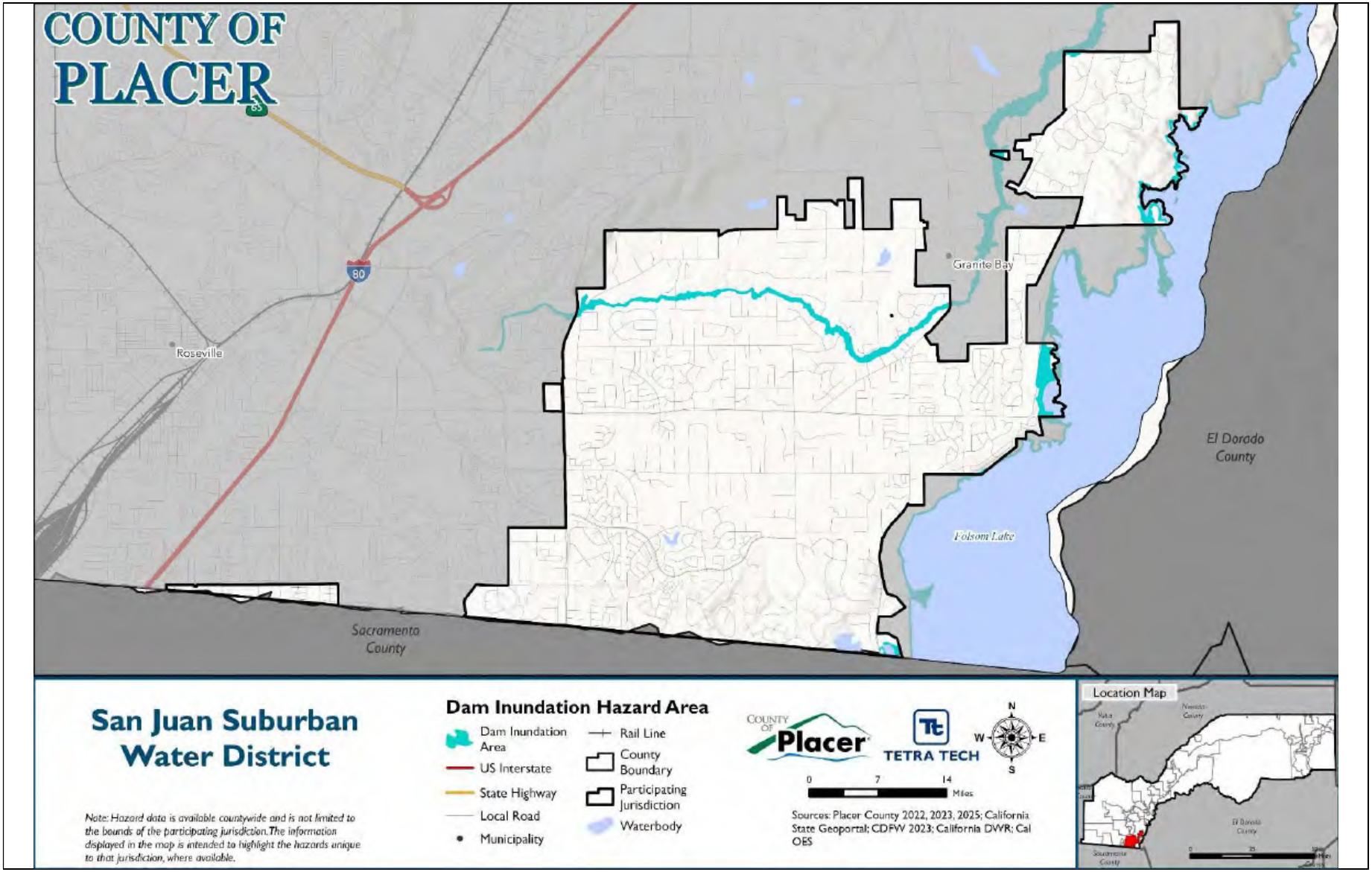


Figure 33-5. Flood Hazard Area

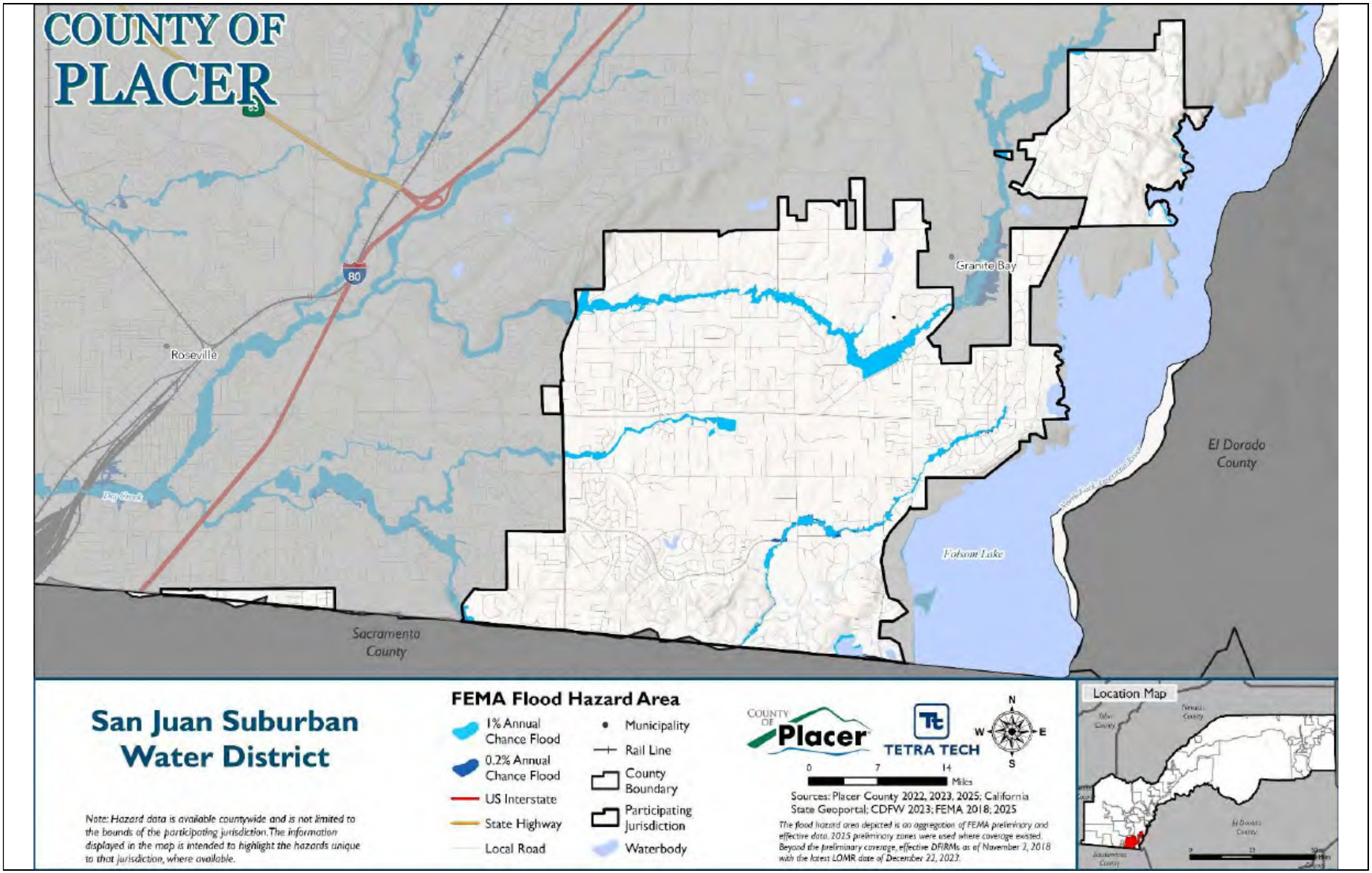


Figure 33-6. Landslide Hazard Area

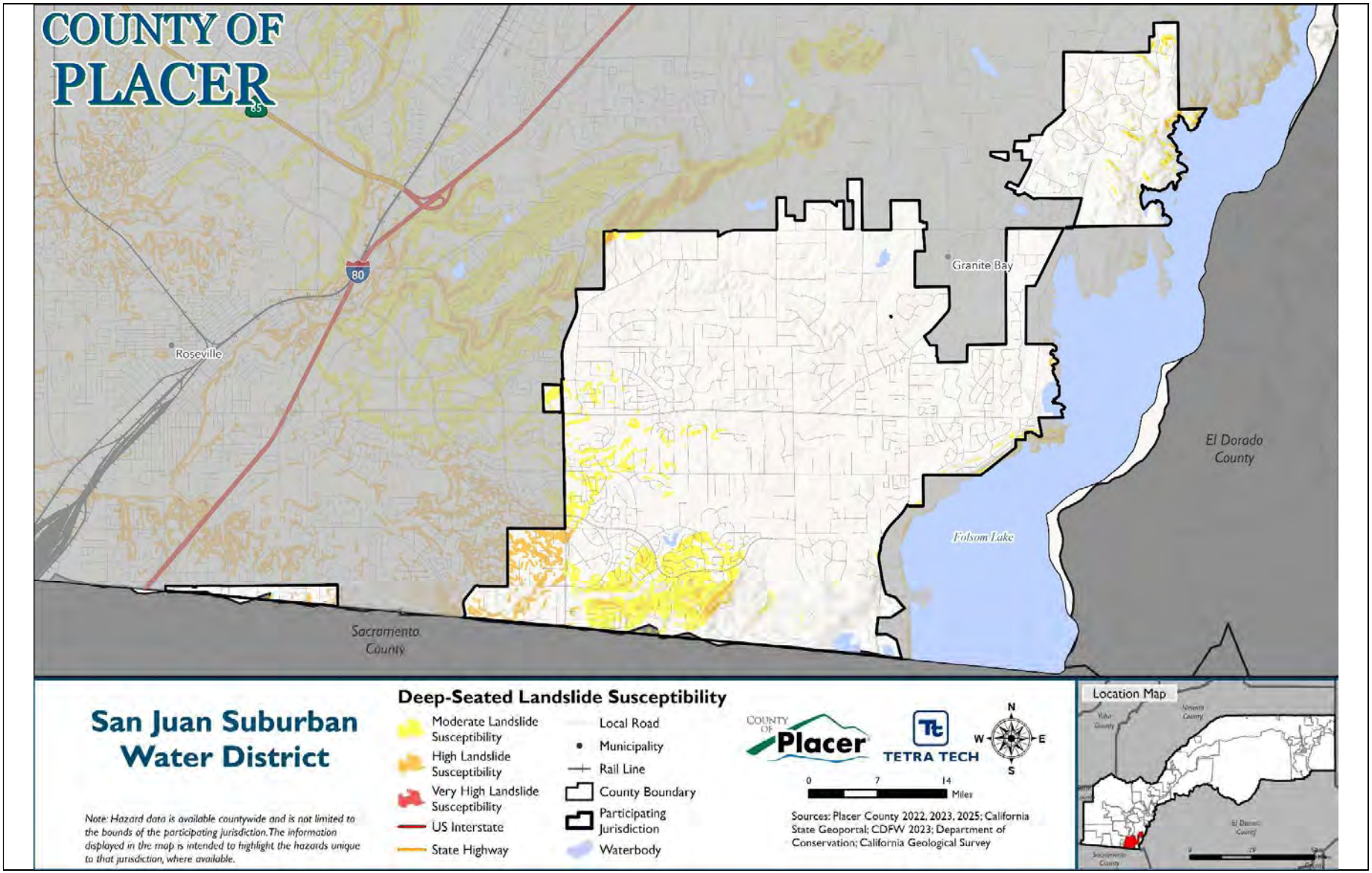


Figure 33-7. NEHRP Hazard Area

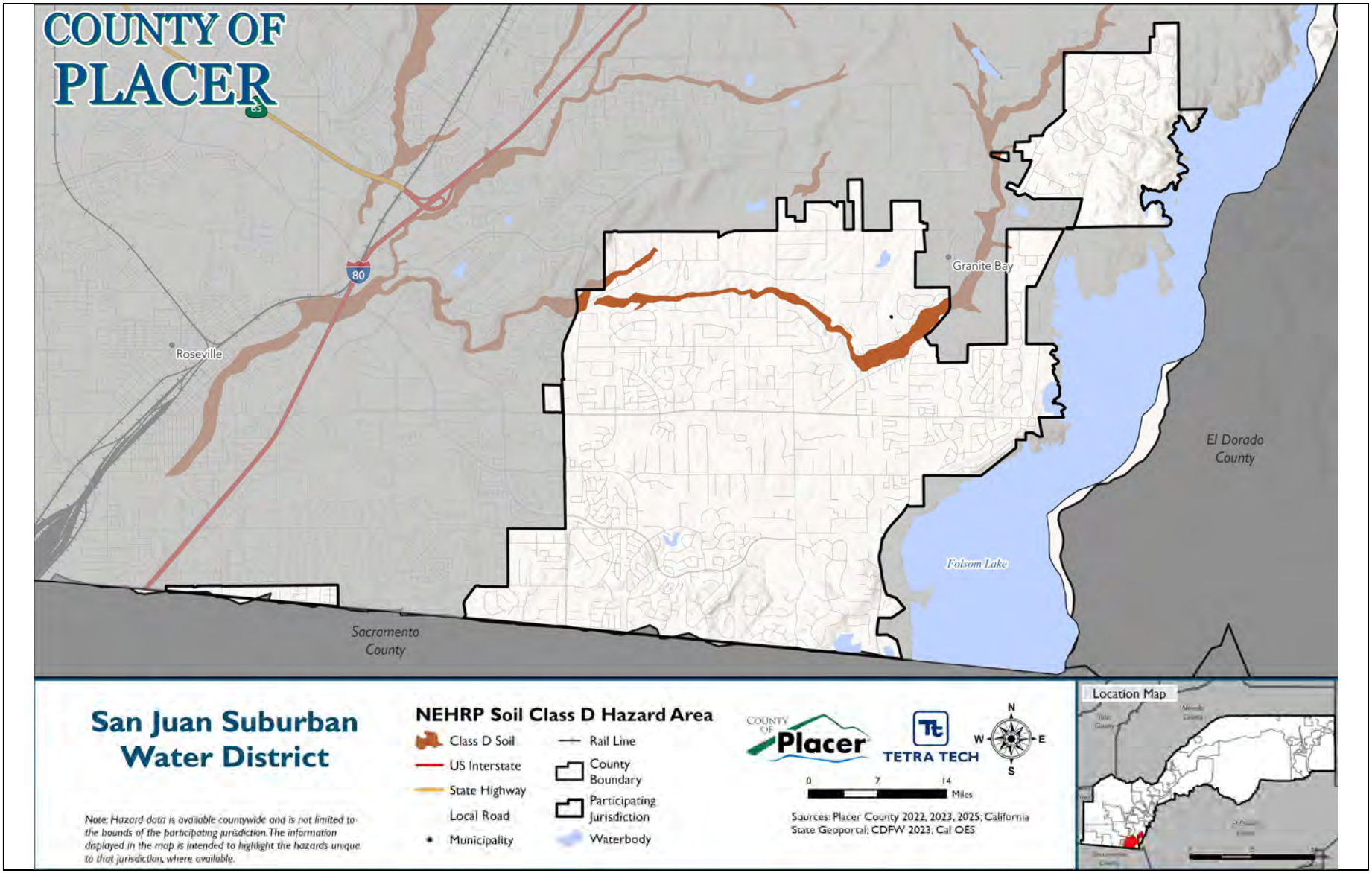
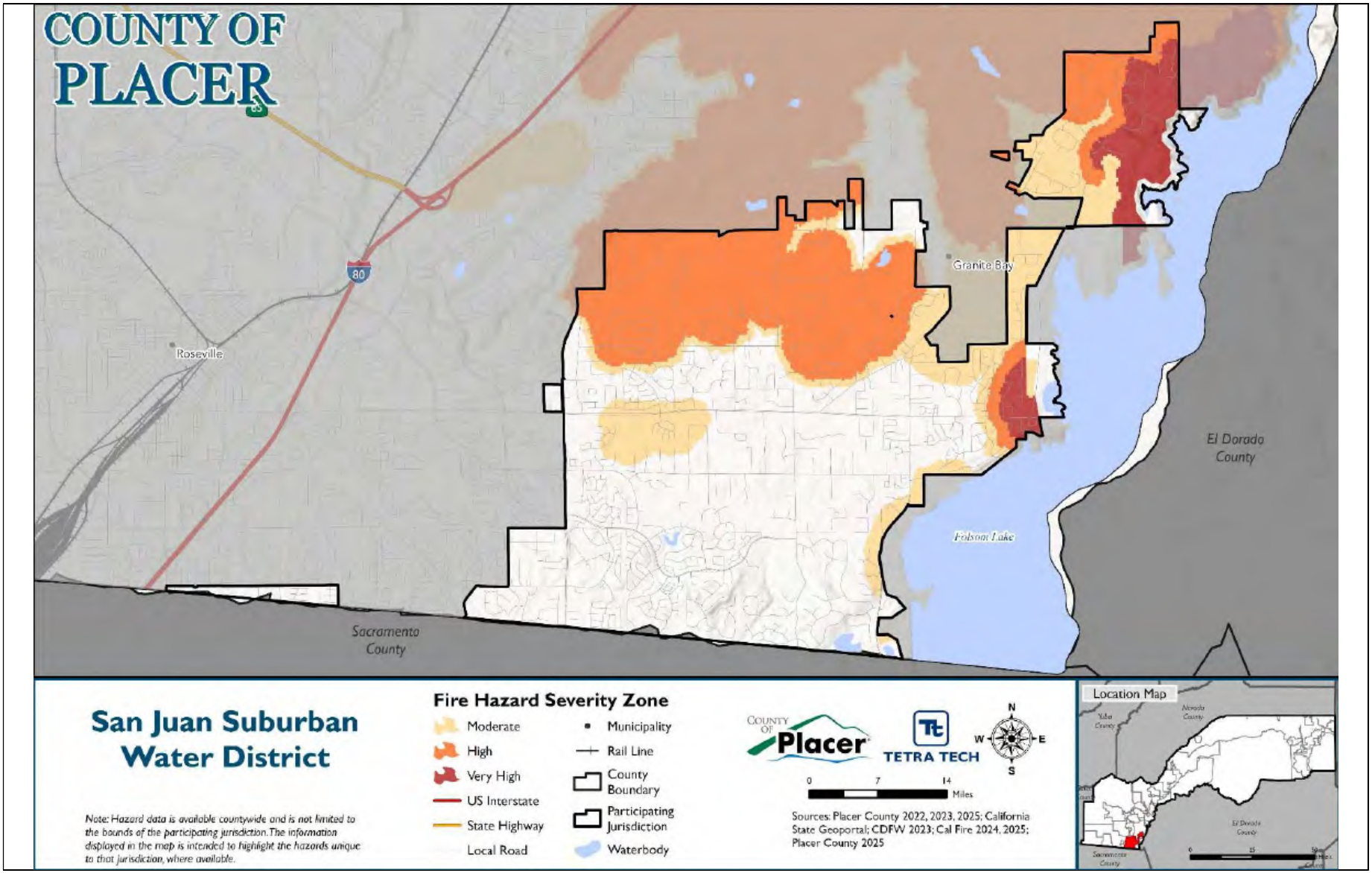


Figure 33-8. Wildfire Hazard Area



33.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 33-9 provides details on loss and damage in SJWD during hazard events since the last hazard mitigation plan update.

Table 33-9. Hazard Event History in SJWD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Power failures at Bacon Pump Station;

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	Downed trees; damage to Main Office deck and roof. 
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	The power to the treatment plant and the Lower Granite Bay pump station went out around midnight Sunday morning and was out through the afternoon (01/8/23).

33.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts

of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

SJWD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 33-10 shows SJWD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 33-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Medium
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	Low

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

33.7.4 Vulnerability Assessment

Table 33-11 lists issues related to the top hazards of concern for SJWD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 33-11. Hazard Issues

Issue	Related Hazards
The current configuration of the existing 4.56 MG floating cover reservoir does not allow the District to access all the water within.	Drought and Water Shortage, Wildfire, Dam and Levee Failure
Describes the availability of water and discusses water use, reclamation, and water conservation activities.	Drought and Water Shortage
The District administration building does not have access to backup power during power outages.	Earthquake, Flood, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire

33.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 33-12 describes the potential impacts of the hazards of local concern to SJWD (hazards identified as medium or high risk in Table 33-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 33-12. Hazard Impacts

Hazard	Potential Impacts
Drought and Water Shortage	Prolonged drought conditions can significantly reduce water availability for agriculture, manufacturing, tourism, and domestic use. Impacts include economic losses, strain on water systems, and increased vulnerability to wildfires and other secondary hazards. Drought impacts equipment and infrastructure, including source water and supply systems, water treatment facilities, storage infrastructure, distribution networks, water quality monitoring systems, and overall system pressure.

33.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect SJWD's overall vulnerability since the previous plan was approved.

33.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

33.8.1 Changes in Community Priorities

Current priorities emphasize strengthening system reliability, meeting regulatory requirements, and improving operational resilience. Focus is placed on initiatives that enhance infrastructure integrity, ensure compliance with planning standards, and provide backup capabilities to maintain uninterrupted service during emergencies. This approach supports long-term sustainability while addressing critical operational needs.

33.8.2 Past Mitigation Action Status

Table 33-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 33-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	The Act requires reporting agencies to describe its water supply reliability under single dry-year, multiple dry-year, and average year conditions, with projected information in five-year increments for a minimum of 20 years. One of the purposes of this UWMP is to ensure the efficient use of available water supplies, as required by the Act. The Act states that urban water suppliers should make every effort to assure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The UWMP describes the availability of water and discusses water use, reclamation, and water conservation activities. This UWMP concludes that the water supplies available to the District's retail and wholesale customer agencies are adequate over the next 25- year planning period.	Updating the 2015 Urban Water Management Plan	Complete	Yes	2020 Urban Water Management Plan completed. The 2025 UWMP is currently being drafted.
2	Replacement of reservoir Hypalon liner and inspection and modifications to outlet structures.	Dam Failure Mitigation	Not Complete	No	No longer aligned with current organizational priorities and will not receive further funding.
3	Earthquake damage to water treatment plant, distribution pump station both above and below ground water distribution mains.	Earthquake Mitigation	Not Complete	No	No longer aligned with current organizational priorities and will not receive further funding.
4	This project would be to install a backup power source for the District's administration building. Two options would be explored, the first would be a solar array with battery storage or a diesel/natural gas emergency generator.	Redundant/Backup Power System	Not Complete	Yes	N/A
5	This project would be to either strengthen the existing water main crossing or when possible, replace the existing main with a larger capacity line to increase water availability for increase fire hydrant flows and increase capacity for existing interties with other agencies.	Water Main Bridge Crossing Replacement/Strengthening	Not Complete	No	No longer aligned with current organizational priorities and will not receive further funding.

33.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, SJWD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Kokila Tank Replacement Project – Replacement of the existing 4.56 MG floating cover reservoir with a 4.0 MG prestressed concrete tank. The current reservoir's configuration prevents operational access to stored water, limiting its effectiveness for system demands. The new concrete tank provides full access, increasing available fire flow and emergency storage while improving system resiliency through a hardened structure less vulnerable to fire and other external hazards.

33.8.4 Hazards Omitted from Mitigation Strategy

SJWD omitted avalanche and freeze and snow from its mitigation strategies due to its lower elevation and lack of significant snowfall.

33.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that SJWD would like to pursue in the future to reduce the risk from hazards.

Table 33-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 33-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	X	-	-
Drought and Water Shortage	X	X	-	-
Earthquake	-	X	-	-
Flood	-	X	-	-
Freeze and Snow	-	-	-	-
Heavy Rains and Storms	-	X	-	-
High Winds and Tornadoes	-	X	-	-
Landslides, Mudslides, and Debris Flows	-	X	-	-
Wildfire	-	X	-	-

LPR = Local Plans and Regulations
SIP = Structure and Infrastructure Project
NSP = Natural Systems Protection
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 33-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 33-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
SJWD-01	Kokila Tank Replacement Project	3	1-5 Years	High	High	6.75	Medium
SJWD-02	2020 Urban Water Management Plan update	3	1-5 Years	Low	High	4.75	Low
SJWD-03	Backup Power System	2	1-5 Years	Low	High	4.5	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

33.8.6 Mitigation Strategy

Table 33-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The SJWD Operations Department will lead implementation of all projects listed in Table 33-16. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 33-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
SJWD-01	Kokila Tank Replacement Project	Replacing an existing 4.56 MG floating cover reservoir with a 4.0 MG restressed concrete tank. The current configuration of the existing reservoir does not allow the District to access all the water within. The new tank will allow operational access to the stored water which increases fire flow storage and emergency volume. Since the tank will be concrete, the water supply will be more secure and not as susceptible to damage if there were a fire or other event nearby.	Drought and Water Shortage, Wildfire, Dam and Levee Failure	None	EPA Grant (Community grant program), State Revolving Fund Grant (All Federal)
SJWD-02	2020 Urban Water Management Plan update	Develop and implement an Urban Water Management Plan (UWMP) that describes water supply reliability under single dry-year, multiple dry-year, and average year conditions, with projected information in five-year increments for a minimum of 20 years. The UWMP describes the availability of water and outlines water use, reclamation, and water conservation activities. This UWMP concludes that the water supplies available to the District's retail and wholesale customer agencies are adequate over the next 25- year planning period.	Drought and Water Shortage	None	Self-Funded

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
SJWD-03	Backup Power System	This project would be to install a backup power source for the District's administration building. Two options would be explored, the first would be a solar array with battery storage or a diesel/natural gas emergency generator.	Earthquake, Flood, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire	None	Self-Funded

34. Sierra Joint Community College District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Sierra Joint Community College District (Sierra JCCD or District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of the Sierra JCCD, describes who participated in the planning process, assesses the District's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Countywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Sierra JCCD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

34.1 Hazard Mitigation Planning Team

Sierra JCCD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Zachary Jones, Safety and Emergency Preparedness Coordinator

Address: 5100 Sierra College Blvd., Rocklin, CA 95677

Phone Number: 916-624-3333

Email: zstanfieldjones@sierracollege.edu

Alternate Point of Contact: Jamison Lopizich, Chief of Community Safety

Address: 5100 Sierra College Blvd., Rocklin, CA 95677

Phone Number: 916-624-3333

Email: jlopizich@sierracolleg.edu

The Department of Community Safety represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 34-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 34-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Zachary Jones	Crisis Response Coordination	Safety and Emergency Preparedness Coordinator	Hazard Data, Community Plans, Subject Matter Expertise, Worksheet Input, Hazard History Information, Mitigation Action Updates, Drafting or Reviewing Parts of the Plan
Jamison Lopizich	Department of Community Safety	Chief of Community Safety	Hazard Data, Community Plans, Worksheet Input, Hazard History Information, Mitigation Action Updates, Drafting or Reviewing Parts of the Plan
Brett Carroll	Finance	Director of Finance	Hazard Data, Community Plans, Subject Matter Expertise, Worksheet Input, Hazard History Information, Mitigation Action Updates, Drafting or Reviewing Parts of the Plan
Ryan Kyle	Facilities	Deputy Director of Facilities and Construction	Hazard Data, Community Plans, Subject Matter Expertise, Worksheet Input, Hazard History Information, Mitigation Action Updates, Drafting or Reviewing Parts of the Plan
Tim Crandell	Facilities	Plant Operations Supervisor II	Hazard Data, Community Plans, Subject Matter Expertise, Worksheet Input, Hazard History Information, Mitigation Action Updates, Drafting or Reviewing Parts of the Plan

34.2 Community Profile

Sierra College is a public community college in Rocklin, California. Sierra College is owned and operated by the Sierra Joint Community College District, a district that covers over 3,200 square miles, serves Placer, Nevada and parts of El Dorado and Sacramento counties.

The college was officially founded in 1936 and is fully accredited by the Western Association of Schools and Colleges. The main campus in Rocklin was chosen by 1960, out of 35 possible sites. The planned construction of Interstate 80 was a consideration in the decision making. In 1961, the new campus opened. In 1996, another campus in Nevada County opened, in between Grass Valley and Nevada City. During 2000–2005, outreach campuses in Roseville and near Truckee were opened. Today the Sierra JCCD serves over 24,000 students.

Sierra JCCD is governed by a board of seven trustees who are elected district-wide and a student trustee. The constituent groups within the district—trustees, faculty, students, management and classified staff—are committed to the mission of providing education and opportunity to area residents. The principle of participatory governance for assuring broad and deep participation in all decisions is a defining feature of the college and district. Sierra JCCD is proud of the District's tradition of strong and stable leadership with only five individuals having held the post of president in the last 50 years and a board with long tenures of service.

34.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, Sierra

JCCD completed the following specific activities to collect input on hazards and vulnerability from the students and staff the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

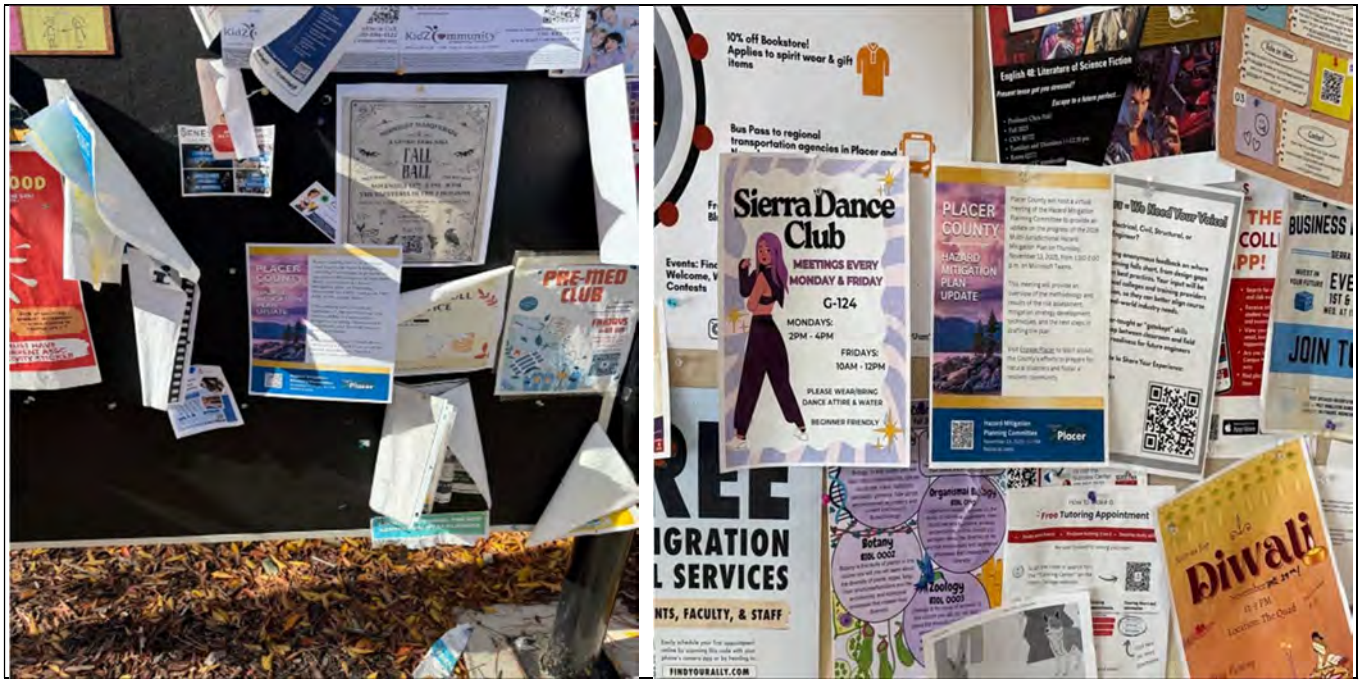
34.3.1 Outreach Activities

Sierra JCCD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

Sierra College has distributed newsletters throughout all designated Free Speech areas to promote community engagement in Placer County's Hazard Mitigation Plan. Newsletters were also placed in various club spaces, and the initiative was highlighted in multiple meetings with faculty, staff, and students.

In addition to virtual outreach, the District undertook several efforts to reach their students and staff by posting flyers on campus. The flyers advertised key events, such as Hazard Mitigation Planning Committee meetings and the public comment period. Figure 34-1 shows the District's efforts to reach students and staff on campus.

Figure 34-1. Additional Public Outreach Activities



34.3.2 Public Feedback Integration

The information used to develop Sierra JCCD's Annex was gathered through open forum discussions with faculty, staff, and students during departmental meetings. In addition, a night-time safety walk was conducted, during which members of the campus community assessed the campus environment, identified potential hazards, and reported safety concerns. The District also maintains a designated Safety Committee that meets monthly to review reported hazards and address other safety-related issues across all District locations.

Community members expressed the greatest concern regarding hazards such as fire, flooding, and power outages. They also identified key vulnerabilities, including aging infrastructure, limited emergency access, and the needs of at-risk populations. Specific concerns were raised about emergency exits and ADA accessibility during evacuations, particularly in older buildings. These insights provided valuable information about local conditions and perceived risks, helping to inform future mitigation and preparedness efforts.

34.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, Sierra JCCD invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

34.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- CAL FIRE
- Placer County Office of Emergency Services

34.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- City of Rocklin
- Placer County Community Development Resource Agency

34.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around Sierra JCCD and share similar hazard risks, response plans, and mutual support agreements.

- California State University, Placer Campus
- Sacramento County

34.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around Sierra JCCD.

- Rocklin Chamber of Commerce
- Rocklin Unified School District
- Roseville Chamber of Commerce

34.4.5 Nonprofit Organizations and Community-Based Organizations

These nonprofit and community-based organizations bring valuable local knowledge, resources, and community connections to the MJHMP process. Their engagement ensures that the perspectives of underserved populations, culturally significant lands, and hazard-prone communities are meaningfully incorporated into the planning effort.

- American Red Cross
- Placer Sierra Fire Safe Council

34.5 Jurisdictional Capability Assessment

Sierra JCCD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Sierra JCCD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Sierra JCCD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

34.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 34-2 summarizes the ordinances currently in place in Sierra JCCD. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 34-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	Sierra College constructs all new buildings in compliance with Department of State Architecture guidelines, ensuring that safety is prioritized throughout the design and construction process. Each facility is built to mitigate the impacts of potential hazards, incorporating features such as fire sprinkler systems, multiple egress points, and tempered safety glass where applicable.	Sierra College Facilities Department/ Department of State Architecture

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and improve	Department Responsible
Site Review Code	The Department of State Architecture (DSA) code significantly impacts hazard mitigation by establishing design and construction standards that enhance the safety and resilience of campus facilities. While the DSA does not specifically address individual natural hazards such as earthquakes, floods, or wildfires within a single section, its building codes and review processes incorporate requirements that mitigate the effects of these hazards. For example, DSA enforces California Building Code standards for seismic safety, fire protection systems, structural integrity, and accessibility, all of which contribute to the overall resilience of Sierra College facilities. These standards ensure that each new building is designed to withstand local hazard conditions and protect the safety of occupants during emergencies.	All construction and major renovation projects are reviewed and approved by the DSA, which ensures that each building meets state safety, structural, and accessibility standards prior to construction. This process helps verify that all facilities are designed with life safety and hazard mitigation as top priorities. In addition, erosion prevention measures are incorporated into individual construction projects as required by the DSA and state environmental regulations.	Department of State Architecture
Stormwater Management Code or Program	All new construction projects at Sierra College incorporate stormwater management into the initial planning and design process. This proactive approach helps reduce flooding risks, prevent erosion, and protect local water quality, supporting both environmental sustainability and hazard mitigation efforts across campus.	All new construction projects at Sierra College incorporate stormwater management into the initial planning and design process. This proactive approach helps reduce flooding risks, prevent erosion, and protect local water quality, supporting both environmental sustainability and hazard mitigation efforts across campus. Sierra College could further expand and strengthen this program by hiring a specialist focused on stormwater runoff and pollution prevention, such as a Chemical Hygiene Officer or Environmental Compliance Specialist, to enhance oversight and ensure continued compliance with state and federal environmental standards.	Storm Water Resources Control Board

34.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 34-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 34-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Sierra College Environmental Impact Report	The Environmental Impact Report (EIR) identifies areas that are suitable for construction and those that are not recommended for development, helping to mitigate potential emergencies and reduce exposure to environmental hazards.	Sierra College continues to expand and improve this plan as new data and technologies emerge, for example, by updating site assessments to account for evolving wildfire risk zones and changes in local environmental conditions.	Sierra College Facilities Department
Emergency Operations Plan	Sierra College maintains an Emergency Operations Plan (EOP) that provides a comprehensive overview of how the College will mitigate, respond to, and recover from any human-caused, natural, or technological disaster. The plan outlines key roles, responsibilities, and procedures to ensure a coordinated and effective response to emergencies impacting the campus community. The EOP also contains Continuity of Operations and Post-Disaster Procedures, and is integrated with the 2021 MJHMP.	Sierra College's Emergency Operations Plan (EOP) is a living document that is regularly reviewed and updated. Following each incident or emergency debrief, the EOP is referenced to identify areas for improvement, ensuring that the plan continues to evolve and adapt to enhance the College's overall preparedness and response capabilities.	Crisis Response Coordination
Facilities Master Plan	Sierra College maintains a current Facilities Master Plan designed to modernize existing buildings and guide the construction of new facilities. All new projects are developed with a safety-conscious approach and are constructed in compliance with Department of State Architecture (DSA) standards to ensure structural integrity, accessibility, and hazard mitigation throughout the campus environment.	This plan continues to undergo a collaborative review process, with input from multiple departments and stakeholders, to identify opportunities for improvement and ensure it remains effective, current, and responsive to the evolving needs of the College and its community.	Sierra College Facilities Department
Stormwater Pollution Prevention Plan	All new construction projects at Sierra College incorporate stormwater management into the initial planning and design process. This proactive approach helps reduce flooding risks, prevent erosion, and protect local water quality, supporting both environmental sustainability and hazard mitigation efforts across campus.	All new construction projects at Sierra College incorporate stormwater management into the initial planning and design process. This proactive approach helps reduce flooding risks, prevent erosion, and protect local water quality, supporting both environmental sustainability and hazard mitigation efforts across campus. Sierra College could further expand and strengthen this program by hiring a specialist focused on stormwater runoff and pollution prevention, such as a Chemical Hygiene Officer or Environmental Compliance Specialist, to enhance oversight and ensure continued compliance with state and federal environmental standards.	Department of State Architecture
Transportation Plan	Sierra College maintains a Transportation Plan that can be utilized to support evacuation efforts during a disaster or emergency. The plan prioritizes safe and accessible routes, ensuring that evacuations are directed away from high-hazard areas and toward designated safe zones to protect the health and safety of the campus community.	Sierra College could enhance and expand its current Transportation Plan by collaborating with community partners including local emergency management agencies and transportation authorities to predetermine emergency evacuation locations. Establishing these sites in advance would strengthen the College's ability to coordinate a campus-wide evacuation efficiently and safely during a large scale emergency.	Sierra College Facilities Department

Name of Plan	Integration	Expand and Improve	Department Responsible
Hazardous Materials Business Plan	Sierra College maintains a Hazardous Materials Business Plan (HMBP) that outlines response procedures for chemical spills, the classification and proper storage of hazardous materials, and established evacuation routes in the event of an incident.	This plan is filed with the Certified Unified Program Agency (CUPA) and ensures compliance with state and federal hazardous materials regulations, supporting the College's ongoing safety, preparedness, and emergency response efforts.	Certified Unified Program Agency (CUPA)

The above mitigation and response plans have already been integrated into the MJHMP, as described in the second column above. These documents incorporate natural and man-made hazard policies and mitigation priorities. As the plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

34.5.3 Development and Permitting Capability

Sierra JCCD is a special district located in the City of Rocklin. The District is subject to the City of Rocklin, Placer County, and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through the City of Rocklin or Placer County. Therefore, development and permitting capabilities are not applicable to the District.

34.5.4 Administrative Capability

Table 34-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 34-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Emergency Management/Public Safety Department	Sierra College employs a full-time Emergency Manager who is responsible for conducting training, drills, and exercises, as well as assisting in the mitigation of potential hazards across the district. In addition, the Department of Community Safety provides a 24/7 presence, responding to incidents and supporting ongoing hazard mitigation and emergency response efforts to ensure the safety of students, faculty, and staff.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Sierra College maintains a full-time Grounds and Facilities Department that plays a key role in supporting and advancing the college's emergency management efforts. These teams conduct regular brush clearing to maintain defensible space, remove tripping hazards, ensure proper lighting, and access control across buildings, and reduce flood risks by clearing and maintaining storm drains. Sierra College also maintains mutual aid agreements with the Rocklin Police Department. Through this partnership, the Rocklin campus is supported by two School Resource Officers and one Sergeant who assist with incident mitigation and response.

34.5.5 Technical Capability

Table 34-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 34-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Planners or engineers with knowledge of land development and land management practices	Facilities Department has full-time staff and contracted employees to help mitigate potential hazards in the building process.
Engineers or professionals trained in building or infrastructure construction practices	Facilities Department has full-time staff and contracted employees to help mitigate potential hazards in the building process.
Planners or engineers with an understanding of natural hazards	Facilities Department has full-time staff and contracted employees to help mitigate potential hazards in the building process.
Transportation planner	Facilities Department has a full-time member who works on transportation and could help with mitigation process
Staff with expertise or training in benefit/cost analysis	Finance Department and members of the Campus EOC
Professionals trained in conducting damage assessments	Risk manager, Emergency Manager, Chief of Community Safety
Staff that work with socially vulnerable populations or underserved communities	As a Community College, countless employees work with socially vulnerable populations and underserved communities
Emergency Manager	Full-time emergency manager who works in hazard mitigation and preparedness
Certified Arborist	The College employs a certified arborist who is responsible for assessing and marking trees across all district locations. The arborist maintains an inventory to support tree conservation efforts, promote campus safety, and help mitigate potential hazards related to vegetation management.

34.5.6 Fiscal Capabilities

Table 34-6 summarizes financial resources available to Sierra JCCD.

Table 34-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Measure E. All projects are DSA approved projects that look to mitigate natural hazards.
Incur debt through general obligation bonds	Sierra College has debt through Measure E.
Other federal or state Funding Programs	Numerous, including Measure E
Open Space Acquisition funding programs	The County collects PCCP land conversion fees, special habitat impact fees, and open space and fire hazard management fees on projects. The fees provide funding for conserving land through fee title or conservation easements, preserving and restoring natural habitats and environmental resources, and fire hazard management on PCCP Reserve System properties. By adopting the PCCP, the County is also eligible for more grants. The PCA has successfully obtained over $19 million in state and federal grant funds.

34.5.7 Education and Outreach Capability

Table 34-7 summarizes the education and outreach resources available to Sierra JCCD.

Table 34-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	The Public Information Officer (PIO) is responsible for issuing Timely warnings and notifications to the campus community in the event of a disaster or hazard that threatens safety. This ensures that students, faculty, and staff receive accurate and prompt information to take appropriate protective actions.
Personnel skilled or trained in website development	The Marketing Department is responsible for managing and maintaining the Sierra College website, ensuring that all information is accurate, up-to-date, and accessible to students, staff, and the public.
Hazard mitigation information available on your website	Information on safety and hazard mitigation is available on the Sierra College website under the Department of Community Safety, providing students, faculty, and staff with resources to prepare for, respond to, and mitigate potential hazards on campus.
Social media for hazard mitigation education and outreach	Sierra College has the capability to promote hazard mitigation practices through social media; however, this is not currently being utilized. The College can expand outreach in this area in collaboration with the Marketing Department, increasing community awareness of safety measures and emergency preparedness initiatives.
Citizen boards or commissions that address issues related to hazard mitigation	Sierra College maintains a Safety Committee that meets monthly to review and discuss strategies for mitigating hazards within the campus community. The committee evaluates potential risks, monitors safety initiatives, and recommends actions to enhance overall campus safety and emergency preparedness.
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	The Crisis Response Coordination Department actively participates in emergency preparedness training and is responsible for notifying the campus community about potential hazards. These efforts ensure that students, faculty, and staff are informed, prepared, and able to respond effectively during emergency situations.
Natural disaster/safety programs in place for schools	The Crisis Response Coordination Department actively participates in emergency preparedness training and is responsible for notifying the campus community about potential hazards. These efforts ensure that students, faculty, and staff are informed, prepared, and able to respond effectively during emergency situations.
Organizations that conduct outreach to socially vulnerable populations and underserved communities	The Crisis Response Coordination Department actively participates in emergency preparedness training and is responsible for notifying the campus community about potential hazards. The department also provides targeted training for vulnerable populations, ensuring that all students, faculty, and staff, including those with special needs, are informed, prepared, and able to respond effectively during emergency situations.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	The Crisis Response Coordination Department actively participates in emergency preparedness training and is responsible for notifying the campus community about potential hazards. These efforts ensure that students, faculty, and staff are informed, prepared, and able to respond effectively during emergency situations.

34.5.8 Community Classifications

Sierra JCCD does not participate in community classification programs, such as the National Flood Insurance Program. However, the District is located within the City of Rocklin. For a summary of community classifications obtained by the City of Rocklin, see Chapter 6.

34.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 34-8 summarizes the adaptive capacity for each identified hazard of concern and the County's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 34-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Weak
High Winds and Tornadoes	Weak
Landslides, Mudslides, and Debris Flow	Weak
Wildfire	Weak

34.6 National Flood Insurance Program

Sierra JCCD is a special district located in the City of Rocklin. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the City of Rocklin assessment of NFIP-insured structures with repetitive loss. This information can be found in Chapter 6.

34.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Placer's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

34.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 34-2 through Figure 34-5. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which the District has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 34-2. Flood Hazard Area

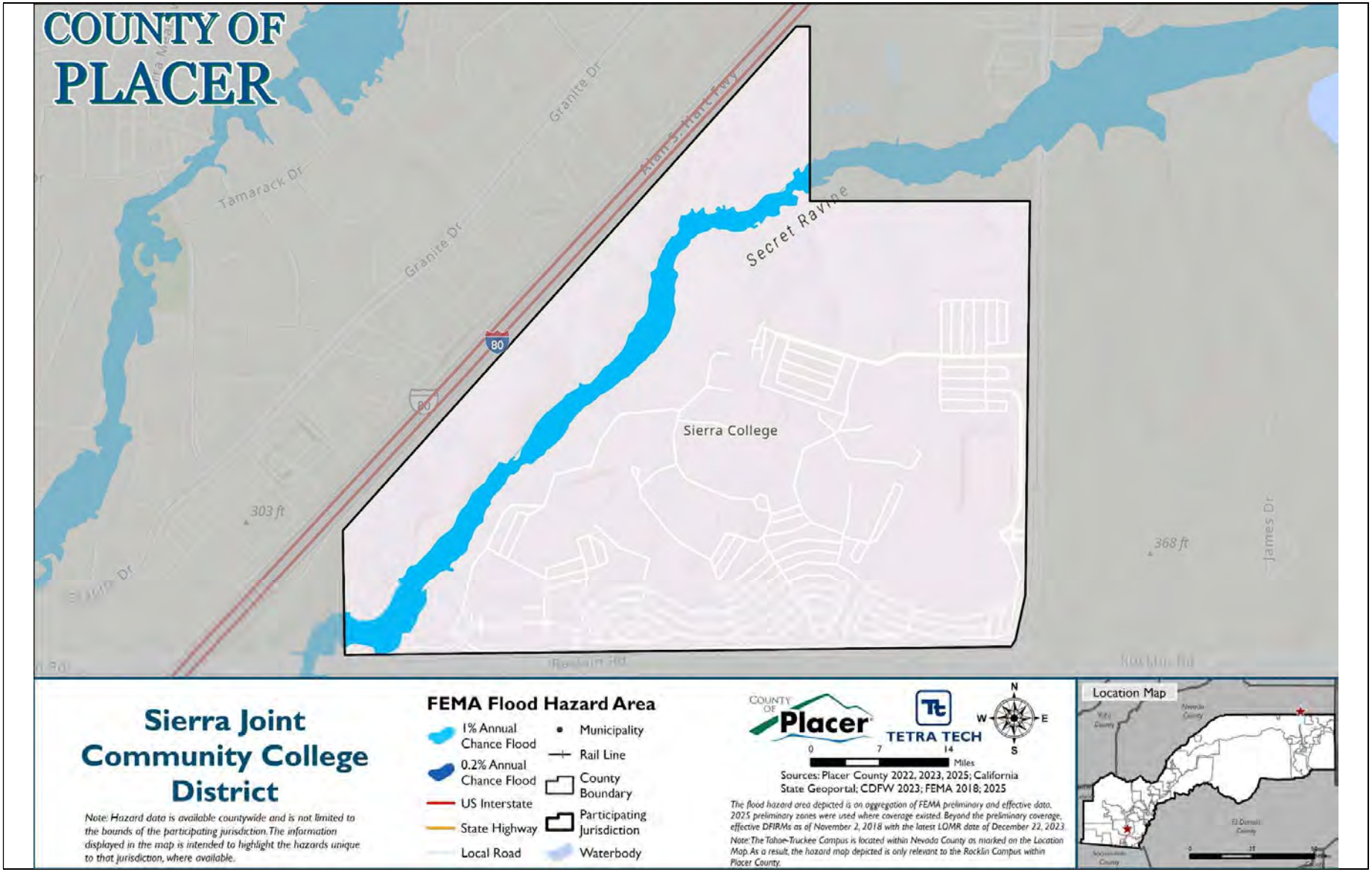


Figure 34-3. Landslide Hazard Area

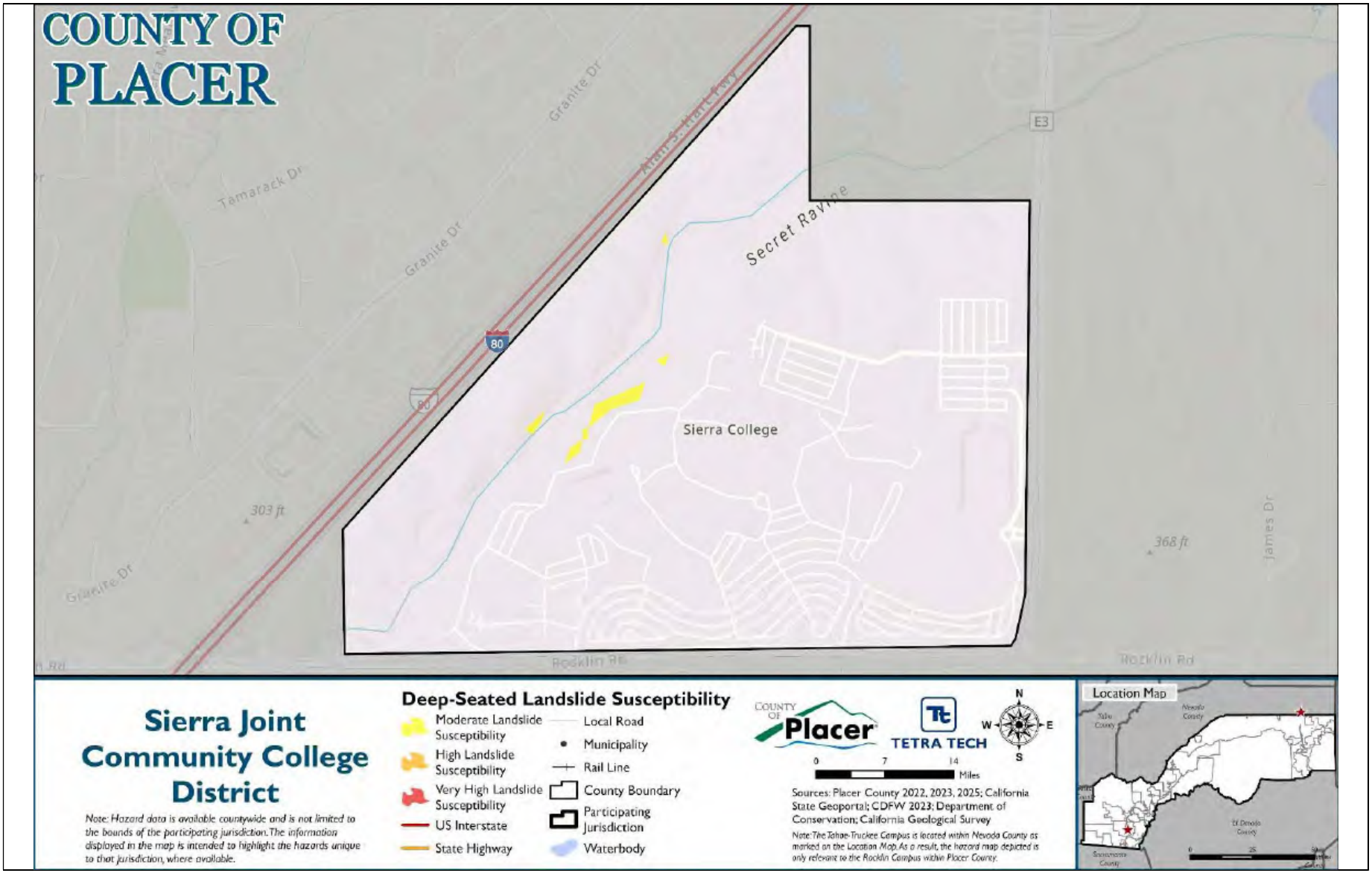


Figure 34-4. NEHRP Soil Class D Hazard Area

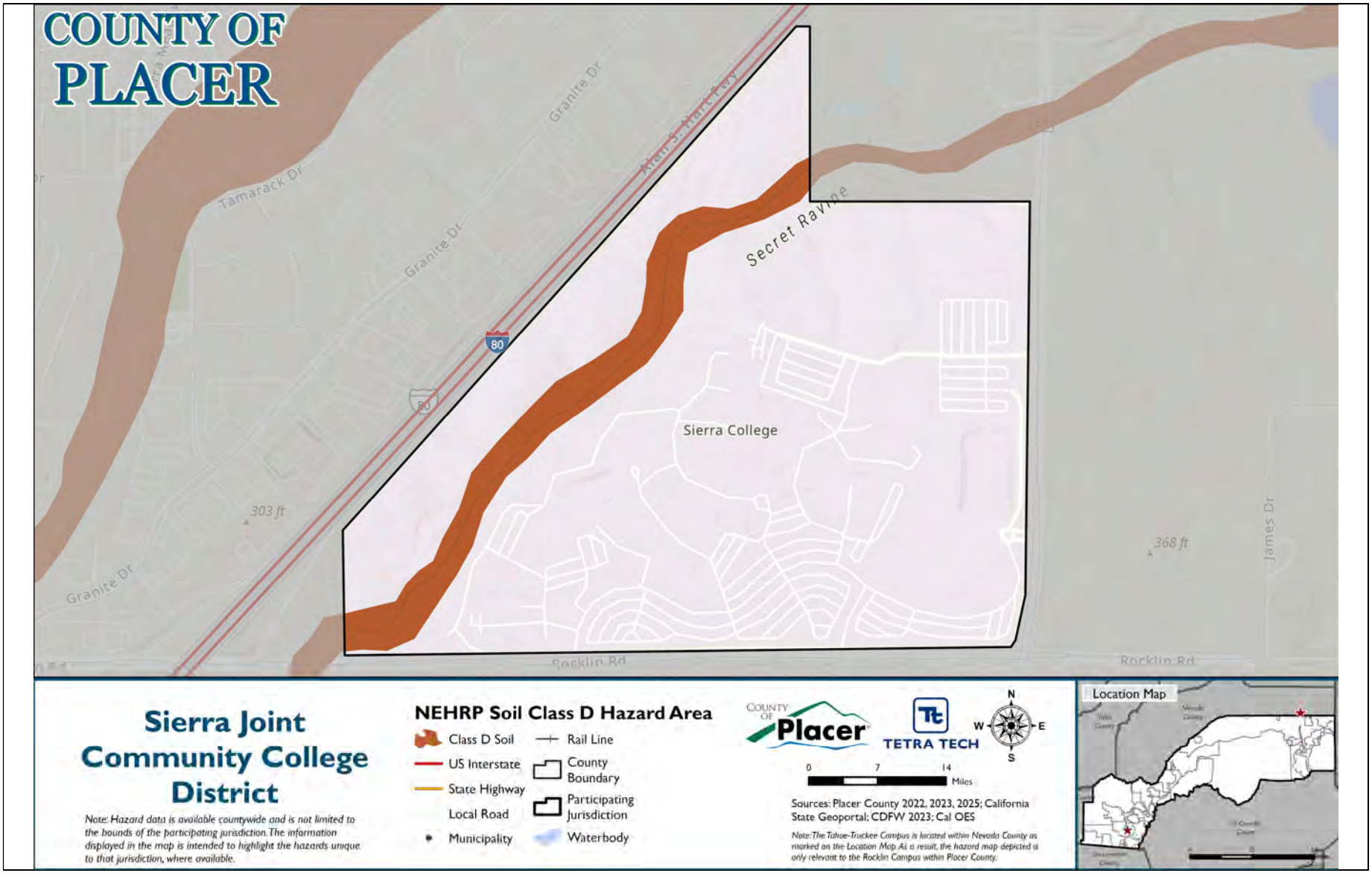
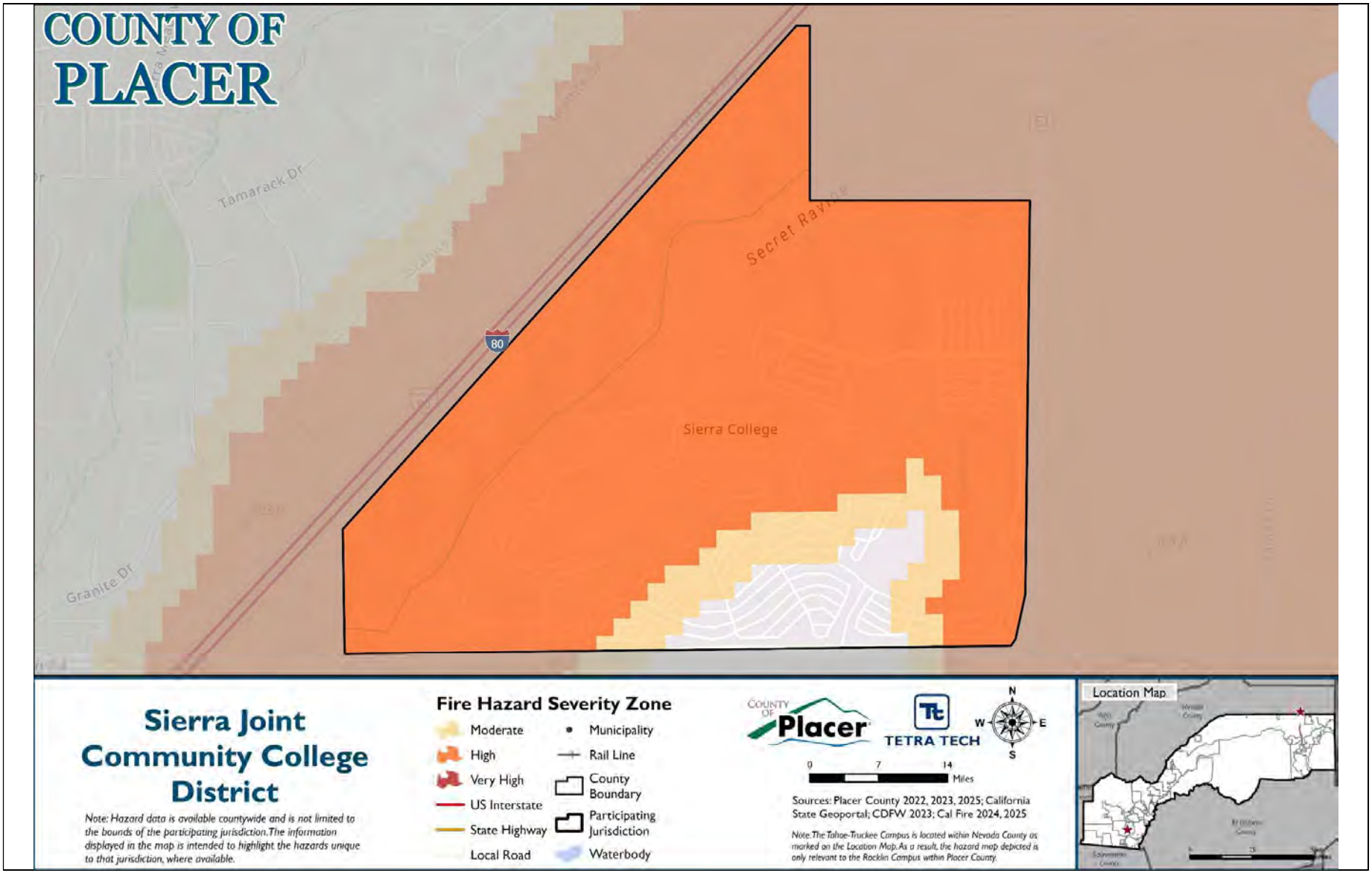


Figure 34-5. Wildfire Hazard Area



34.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 34-9 provides details on loss and damage in Sierra JCCD during hazard events since the last hazard mitigation plan update.

Table 34-9. Hazard Event History, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 12, 2023	January 12, 2023	Power Outage on Campus	On January 12, 2023, a semi-truck struck a power line on Sierra College Boulevard, causing a power outage at the Rocklin campus. The campus was evacuated, backup generators maintained critical systems, and the College remained closed for the weekend until power was restored.	Disruption in operations

34.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Sierra JCCD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. Table 34-10 shows Sierra JCCD's hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 34-10. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Low
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

34.7.4 Vulnerability Assessment

Table 34-11 lists issues related to the top hazards of concern for Sierra JCCD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 34-11. Hazard Issues

Issue	Related Hazard
Emergency preparedness training helps the campus community by equipping faculty, staff, and students with the knowledge and skills needed to respond effectively during emergencies. This training reduces confusion and delays during incidents, minimizes potential injuries and property damage, and builds overall resilience, ensuring that the College can maintain safety, continuity of operations, and a coordinated response to hazards.	Earthquake, Flood, Freeze and Snow, Landslides Mudslides and Debris Flow, Heavy Rains and Storms, Wildfire
Fire mitigation in the Nature Area helps the community by reducing the risk of wildfires spreading to campus and nearby neighborhoods, protecting lives, property, and natural resources. It also ensures that the campus can remain a safe and accessible space for students, staff, and visitors, while supporting emergency response efforts and overall community resilience.	High Winds and Tornadoes, Wildfires
Enhancing these capabilities will improve situational awareness, support rapid response and strength overall campus safety and resilience	Earthquake, Flood, Freeze and Snow, Landslides Mudslides and Debris Flow, Heavy Rains and Storms, Wildfire

34.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 34-12 describes the potential impacts of the hazards of local concern to Sierra JCCD (hazards identified as medium or high risk in Table 34-10).

Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 34-12. Hazard Impacts

Hazard	Potential Impacts
Landslides, Mudslides, and Debris Flow	Landslides, mudslides, and debris flows can occur on or near steep slopes, especially during periods of heavy rainfall or rapid snowmelt. These events may block access roads, damage campus infrastructure, and disrupt utilities and essential services. In severe cases, they can pose a direct threat to the safety of students, faculty, and staff, and may require evacuation or temporary closure of affected areas. Secondary impacts include increased risk of flooding and erosion, which can further compromise campus operations and property.
Wildfire	A significant portion of the District lies within High or Moderate Fire Hazard Severity Zones. Despite ongoing fuel reduction efforts, including brush and deadwood clearance in natural areas, the risk of wildfire remains. Such an event could result in damage to District facilities and equipment and pose a serious threat to the safety of District personnel.

34.7.6 Changing Conditions That May Impact Risk

The District currently operates three facilities, one of which is in Placer County. Within the past five years, the District has completed construction of two new buildings. The first is the Q Building, a three-story academic facility that includes classrooms and dedicated learning spaces. The second is a new residence hall that opened in January 2026, designed to accommodate up to 300 students, and centrally located on campus. Neither building is situated within a flood zone. As a result, the overall vulnerability of the District has decreased since the previous plan was approved.

34.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

34.8.1 Changes in Community Priorities

The District has not had any changes in community priorities since the 2021 MJHMP.

34.8.2 Past Mitigation Action Status

Table 34-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 34-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project Name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	This project will mitigate hazards by training staff and students on potential hazards, and seeking ways to respond to those hazards in times of emergencies. There will be an educational component to this mitigation action.	Campus safety: fire, earthquake, active shooter, power outage, health emergencies, and pandemics.	Complete	No	Project has been completed
2	Design and implement storm water management solutions, including retention ponds and drainage systems.	Storm Water Flooding Mitigation	Complete	No	Project has been completed
3	Redesign campus landscaping to reduce watering needs.	Drought Tolerant Landscaping	Complete	No	Project has been completed
4	Expand efforts to clear brush and deadwood in nature areas.	Fuel Reduction	Complete	No	Project has been completed
5	Review need for back-up power and assess feasibility of installing emergency generators. The District has installed a number of generators of the years, but continues to assess changing needs and threats through ongoing planning.	Emergency Power Generation	Complete	No	Project has been completed

34.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, Sierra JCCD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Sierra College mitigates the potential impacts of earthquakes through several proactive measures. Heavy appliances and equipment are securely anchored or strapped to prevent movement during seismic activity, and heavy items are not stored above head level to reduce the risk of injury. In addition, the College provides earthquake preparedness training to all faculty and staff to ensure awareness of safety procedures and proper response actions before, during, and after an event.
- Sierra College mitigates the potential impacts of flooding through proactive maintenance and preparedness measures. The College ensures proper water runoff by maintaining drainage systems and keeping storm drains clear of debris. In areas identified as prone to flooding during periods of heavy rain, sandbags are strategically placed to help prevent water intrusion and property damage. These efforts support campus safety and minimize disruption during severe weather events.
- Freezing temperatures and snowfall are common at the Truckee Campus. During periods of significant snow accumulation, Sierra College mitigates associated hazards by suspending classes to ensure the safety of students, faculty, and staff. Classes resume only after roadways and campus pathways have been cleared and deemed safe for travel, minimizing risk to the campus community.

- Sierra College mitigates the impacts of heavy rain and severe storms through proactive maintenance and preparedness measures. Storm drains are routinely inspected and cleared to ensure proper water flow and prevent flooding. Tree maintenance is conducted regularly to remove branches that could break or fall during high winds, reducing the risk of property damage and injury. In addition, backup generators are strategically located in key campus buildings to maintain essential operations during power outages.
- Given the geographic locations of Sierra College's Rocklin and Truckee campuses, the risk of landslides, mudslides, or debris flow is considered low. However, the College conducts routine maintenance and monitoring of campus grounds to limit potential impacts and ensure slope stability where applicable. These ongoing efforts help maintain campus safety and minimize the likelihood of damage from soil movement or erosion.
- Sierra College actively implements wildfire mitigation measures to protect campus facilities and the surrounding community. These measures include the removal of dead or overgrown vegetation, regular trimming of trees away from building roofs, and the establishment of defensible space around structures where applicable. These proactive steps help reduce fuel for potential fires and enhance overall campus safety during wildfire events.

34.8.4 Hazards Omitted from Mitigation Strategy

Sierra College has implemented targeted mitigation measures to address the most significant hazards, while strategically omitting actions for hazards determined to be highly unlikely to occur on District campuses.

Avalanche:

Given Sierra College's low elevation and the minimal likelihood of significant snowfall at the Rocklin Campus, no specific mitigation measures for avalanches are currently necessary or implemented.

Dam and Levee Failure:

Sierra College does not currently implement mitigation measures for dam or levee failure due to the significant distance between the Rocklin Campus and any major dams or levee systems. The campus is located well outside potential inundation zones, and the risk of flooding from such events is considered extremely low.

Drought and Water Shortage:

Sierra College has implemented several mitigation efforts to reduce the impacts of drought. The College utilizes drought-tolerant and native landscaping throughout its campuses, which significantly reduces the need for irrigation and conserves water resources. Additionally, efficient irrigation systems and water-wise maintenance practices are employed to minimize water usage. These measures support long-term sustainability and demonstrate Sierra College's commitment to responsible water management and environmental stewardship.

High Winds and Tornadoes:

Given the very low risk of tornado activity in the Rocklin area, Sierra College does not implement specific mitigation measures for tornadoes. However, the College conducts regular maintenance of campus buildings and trees to mitigate the impacts of high winds. These efforts help prevent property damage, reduce safety hazards from falling debris, and ensure the continued resilience of campus infrastructure during severe weather conditions.

34.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Sierra JCCD would like to pursue in the future to reduce the risk from hazards.

Table 34-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 34-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	-	-	-
Drought and Water Shortage	-	-	-	-
Earthquake	-	X	-	X
Flood	-	X	-	X
Freeze and Snow	-	X	-	X
Heavy Rains and Storms	-	X	-	X
High Winds and Tornadoes	-	-	X	-
Landslides, Mudslides, and Debris Flows	-	X	-	X
Wildfire	-	X	X	X

LPR = Local Plans and Regulations *NSP = Natural Systems Protection*
SIP = Structure and Infrastructure Project *EAP = Education and Awareness Programs*
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 34-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 34-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
SJCCD-01	Emergency Preparedness Training	9	1-5 Years	High	Low	10.25	High
SJCCD-02	Fuel Reduction	3	1-5 Years	High	Low	8.75	High
SJCCD-03	Mass Communication Capabilities	7	1-5 Years	High	High	7.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

34.8.6 Mitigation Strategy

Table 34-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 34-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
SJCCD-01	Emergency Preparedness Training	The District will provide continued emergency preparedness and mitigation training for all faculty, staff, and students to enhance resilience and strengthen response capabilities across the district. These trainings ensure that the campus community is better prepared to respond effectively to emergencies and hazards, promoting overall safety and continuity of operations.	Earthquake, Flood, Freeze and Snow, Landslides Mudslides and Debris Flow, Heavy Rains and Storms, Wildfire	Crisis Response Coordination	Crisis Response Coordination, Department of Community Safety	Staff Time
SJCCD-02	Fuel Reduction	The District will implement fire mitigation strategies in the Nature Area to reduce the risk of wildfires, protect natural resources, and ensure the safety of the campus community. Specific projects include, but are not limited to, vegetation management, removal of dead or overgrown brush, and creation of defensible space around buildings and pathways. Removal of dead or dying vegetation will reduce debris in the event of a landslide or debris flow. These efforts support both environmental stewardship and hazard mitigation objectives.	High Winds and Tornadoes, Wildfires, Landslides Mudslides and Debris Flow	Facilities Department	Facilities Department	General Funds

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
SJCCD-03	Mass Communication Capabilities	Sierra College aims to expand mass communication capabilities throughout the District to ensure timely and effective dissemination of emergency alerts, hazard notifications, and preparedness to all students, faculty, staff and visitors. This action can be achieved by installing emergency alert beacons to have an audible alert with a text-to-speech feature.	Earthquake, Flood, Freeze and Snow, Landslides Mudslides and Debris Flow, Heavy Rains and Storms, Wildfire	Department of Community Safety	Department of Community Safety, Crisis Response Coordination, ITS	General Funds

35. South Placer Fire District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in the South Placer Fire District (South Placer FD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of South Placer FD, describes who participated in the planning process, assesses South Placer FD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Districtwide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to South Placer FD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

35.1 Hazard Mitigation Planning Team

The South Placer FD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Jeff Ingolia, Division Chief and Fire Marshal

Address: 6900 Eureka Road, Granite Bay, CA 95746

Phone Number: 916-791-7059

Email: jingolia@southplacerfire.org

Alternate Point of Contact: Mark Duerr, Fire Chief

Address: 6900 Eureka Road, Granite Bay, CA 95746

Phone Number: 916-791-7059

Email: mduerr@southplacerfire.org

The Fire Marshal and Fire Chief represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 35-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 35-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Jeff Ingolia	South Placer FD	Division Chief/Fire Marshal	Primary point of contact for all planning activities, contributed subject-matter expertise
Mark Duerr	South Placer FD	Fire Chief	Supported worksheet completion and draft document review
Matt Feeley	South Placer FD	Deputy Chief	District hazard and mitigation project history
James Magnuson	South Placer FD	Emergency Medical Services Division Chief	Review draft documents and provide feedback

35.2 Community Profile

South Placer FPD was formed on January 10, 1952. The principal act that governs the District is the FPD Law of 1987. This Act empowers FDs to provide fire protection, rescue, emergency medical, hazardous material response, ambulance, and any other services relating to the protection of lives and property. South Placer FPD is located entirely within Placer County and encompasses about 55 square miles. The District serves approximately 36 square miles of unincorporated Placer County (including the communities of Granite Bay and portions of Loomis, and Newcastle), and the Town of Loomis. The District's boundary area consists of four non-contiguous parts. Three smaller areas are surrounded by the City of Roseville from three sides; in the south they are bordered by Sacramento County. The largest non-contiguous South Placer FPD portion to the east completely surrounds a small island of the City of Roseville and is bordered by the cities of Roseville and Rocklin in the west, Loomis, Penryn and Newcastle FPDs in the north, and Folsom Lake in the east.

35.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to those regional efforts, the South Placer FD undertook specific activities to gather input on local hazards and community vulnerability from the residents and stakeholders it serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

35.3.1 Outreach Activities

South Placer FD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

These engagement efforts included collaboration with trusted community partners, such as the Loomis Administrative Services Department and the Granite Bay Municipal Action Committee. Stakeholders played a key role in helping the District identify local hazards and determine the most vulnerable populations, particularly given their involvement in mutual aid during extreme or large-scale emergencies. Input was collected through meetings, surveys, feedback opportunities, review of draft materials, and the sharing of historical knowledge.

The public was invited to contribute to the planning process by responding to surveys, attending Hazard Mitigation Planning Committee meetings, and reviewing the draft plan. This approach helped ensure that the perspectives and needs of the whole community were meaningfully incorporated into the planning process.

As part of its outreach efforts, the District promoted public participation in the hazard mitigation planning process by sharing a flyer with the public survey link on its website and making printed copies available at the front counter of its business office. Additional engagement occurred at District Board Meetings, where MJHMP flyers and the hazard mitigation public survey link were distributed and discussed to encourage further community input. Figure 35-1 and Figure 35-2 show these outreach efforts.

35.3.2 Public Feedback Integration

Public input was collected through speaking with residents in the District, community surveys, and online comment forms. This feedback was analyzed to identify which hazards residents were most concerned about, such as wildfire, and flooding in low-lying areas. These insights were then used to adjust the hazard rankings in the plan, ensuring that the final rankings reflected not only technical data but also the lived experiences and concerns of the community.

Community members expressed the greatest concern about wildfire and highlighted vulnerabilities including unmaintained open spaces, uncertainty on how to create defensible space, insurance costs, emergency availability and access, and the needs of at-risk populations, providing valuable insight into local conditions and perceived risks.

Figure 35-1. Website

Figure 35-2. Printed Flyers

35.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

35.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County. Engagement with local water agencies is both important and necessary, as these agencies offer valuable insight into the capabilities and limitations of the region's water systems, as well as the potential risks to the community in the event of system failure.

- CAL FIRE
- Granite Bay Municipal Action Committee
- Loomis Administrative Services Department
- Placer County Office of Emergency Services
- Placer County Sheriff's Office
- Placer County Water Agency
- San Juan Water District

35.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning. All stakeholders listed below will support the South Placer FD in identifying local hazards. These determinations may be informed through meetings, surveys, feedback, review of draft materials, and the sharing of historical knowledge.

- Placer County Building Official
- Placer County Community Development Resource Agency & Planning Services
- Loomis Planning Department
- Loomis Building Official

35.4.3 Neighboring Communities

These stakeholders are neighboring communities located in or around the District.

- Roseville Fire Department
- Rocklin Fire Department

- Folsom Fire Department

35.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around the District.

- Granite Bay Municipal Action Committee
- Horseshoe Bar Municipal Action Committee

35.4.5 Nonprofit Organizations and Community-Based Organizations

These stakeholders are nonprofit and community-based organizations that provide services in and around the District. All stakeholders listed above will assist the South Placer FD in identifying local hazards and determining the most vulnerable populations within the community. These determinations may be informed through meetings, surveys, feedback, review of draft materials, and the sharing of historical knowledge.

- Loomis Chamber of Commerce
- First United Methodist Church

35.4.6 Other Stakeholders

All stakeholders listed below will support the South Placer FD in identifying local hazards.

- Hidden Lakes Estates HOA
- Firewise USA
- Hidden Valley HOA

35.5 Jurisdictional Capability Assessment

South Placer FD performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs

- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for South Placer FD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, South Placer FD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

35.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 35-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 35-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	Mitigates hazards through structural, seismic, fire, and flood safety requirements, explicitly addresses natural hazards like earthquakes, wildfire, and flooding, and establishes resilience standards via construction and design regulations.	Building Code enforcement in the jurisdiction is the responsibility of Placer County and Town of Loomis Building Officials. However, many hazard mitigation requirements—such as WUI regulations, access, fire-resistive construction, hazardous materials, and emergency preparedness—are duplicated in both codes. It is essential to recognize these overlaps and support local officials through consistent Fire Code amendments and field inspections.	Placer County Building Department Town of Loomis Building Department CA Health and Safety Code

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Zoning/Land Use Code	Mitigates hazards by restricting development in high-risk areas, references natural hazards like floodplains and wildfire zones, and establishes resilience standards through land-use designations and development controls.	**Embedding fire expertise into planning workflows** — from data sharing and project review to ordinance updates and community education. This ensures hazard considerations are **not just a planning exercise but are tied directly to operational realities in the field**.	Placer County Community Development Resource Agency (CDRA) through the Planning Services Division. The Town of Loomis Planning Department and Planning Commission.
California Fire Code **Title 24, Part 9** **January 1, 2026**	The California Fire Code is a comprehensive set of state regulations based on the International Fire Code (IFC) that establishes standards for life and property safety from fire and explosion hazards. It covers areas such as the storage and handling of hazardous materials, building construction, fire suppression systems, and conditions hazardous to life and property.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Health and Safety Code **January 1, 2025**	The California Health and Safety Code is California's statutory law for health, safety, and related areas, covering topics from hazardous waste and environmental law to controlled substances and workplace safety through Cal/OSHA.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
Subdivision Code	It mitigates hazards by requiring safe access, drainage, and infrastructure in new developments, considers natural hazards like flooding and wildfire, and establishes resilience standards through subdivision design and improvement requirements.	Pushing for **stronger access, water supply, defensible space, and evacuation requirements,** while also ensuring **long-term maintenance** is locked into HOA agreements. The most effective approach is to combine **clear technical standards** with **legal mechanisms** (ordinances, CC&Rs, bonds) so mitigation measures don't fade after the project is approved.	Placer County Planning Commission, Parcel Review Committee, Board of Supervisors and Board of Zoning Appeals. The Town of Loomis Planning Department. CA Health and Safety Code

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Site Review Code	The Site Review Code limits development in hazardous areas (flood, mudslide, avalanche), requires grading/drainage controls to reduce risks, and sets resilience standards by mandating engineering and floodplain management in such zones.	Requiring stronger access and water supply standards, defensible-space and landscaping rules, early fire protection triggers, and evacuation planning. Clear addressing, identification of hazards, and streamlined review processes with checklists and standard conditions further ensure fire safety is built into every project from the start.	Placer County Community Development Resource Agency Town of Loomis Building and Planning Departments
Stormwater Management Code or Program	Helps mitigate hazards mainly tied to **flooding and erosion** by requiring best management practices for runoff, pollution control, and post-development runoff standards.	Requiring **post-fire runoff planning, resilient drainage for emergency access, green infrastructure that doubles as fire protection, stronger maintenance enforcement, dual-use water features, and debris flow safeguards**—all tied directly to local hazard mitigation goals.	Placer County Stormwater Quality Division, Flood Control District and CDRA. Town of Loomis Public Works Department.
Erosion/Sediment Control Program	Requires erosion & sediment control plans (triggered by slope, grading size, proximity to watercourses), mandates stabilization of disturbed soil, and includes BMPs to reduce erosion and sediment discharge — thereby addressing hazards like flooding, erosion, and sedimentation and building resilience through preventive standards.	Advocating for stricter post-fire runoff protections, requiring erosion BMPs (like wattles, mats, and basins) in WUI developments, ensuring stormwater features also support emergency access, and pushing for stronger inspection and maintenance enforcement. These measures help reduce flooding, debris flows, and infrastructure loss, directly tying erosion control to local hazard mitigation.	Placer County Engineering and Surveying Division. Town of Loomis Public Works Department.
Post-Disaster Recovery/ Reconstruction Code	Does integrate mitigation into its hazard planning and Local Hazard Mitigation Plan, which identifies hazards (wildfire, floods, drought, etc.) and includes policy for more resilient recovery after disasters.	Advocating for stronger rebuild standards in hazard areas—such as requiring fire-resistant materials, defensible space, and upgraded access and water supply—when properties are reconstructed. They can also push for expedited but safer permit review processes, integrate erosion and debris-flow protections, and ensure that recovery plans align with long-term hazard mitigation goals.	Placer County Office of Emergency Services, Building, Planning, and Engineering Departments. The Town of Loomis, Mayor, City Manager, Public Works, and Town Council. CA Health and Safety Code

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Real Estate Disclosure	Requires sellers to state whether a property lies in certain mapped natural hazard zones (e.g. flood, earthquake fault/seismic hazard, fire severity). They don't enforce resilience standards themselves, they inform buyers of risk, which may have downstream effects (insurance, decisions), but aren't construction or mitigation mandates.	Working with local governments to ensure buyers are fully informed about wildfire, flood, and evacuation risks. This can include requiring disclosure of WUI zones, defensible space compliance, fire history, and evacuation constraints in property reports, and partnering with Placer County and Loomis to standardize hazard maps and safety checklists as part of the real estate transaction process.	California Civil Code and the California Department of Real Estate.
Growth Management Ordinance	Controls location, pace, and character of growth, indirectly reducing exposure by limiting development in hazard-prone areas.	Ensuring that new development accounts for hazard risks up front—such as requiring safe evacuation capacity, adequate fire flow and water supply, defensible space, and limits on growth in high-risk WUI or flood-prone areas. By linking growth approvals to hazard mitigation standards, Placer County and Loomis can better align development with long-term community safety and resilience.	Placer County Planning Services Division and CDRA Town of Loomis Town Council, Planning Department, and Town Manager
Environmental Protection Ordinance(s)	Chapter 18.04, Environmental Review Ordinance (CEQA implementation); Title 17, Article 17.52 – Combining Districts, including: –FP (Floodplain Combining District) –GH (Geological Hazard Combining District). Chapter 12, Article 12.16 – Tree Ordinance.	Advocating for measures that reduce hazard risks—such as requiring vegetation management and defensible space in sensitive areas, protecting wetlands and riparian zones that help absorb floodwaters, and ensuring development avoids steep slopes prone to erosion or debris flows.	Placer County CDRA and Planning Services Division. Loomis Public Works Department, Planning and the Town Engineer. CA Health and Safety Code
Flood Damage Prevention Ordinance	Directly addresses the natural hazard of **flooding,** reduces risk through floodplain development restrictions and elevation standards, and establishes resilience by requiring flood-resistant construction in mapped flood zones.	Advocating for stricter building standards in flood-prone areas, requiring elevated structures, reinforced access roads, and protected utilities to maintain emergency response. Also, by promoting and integrating floodplain maps with evacuation planning and ensuring that new developments include drainage and detention systems designed to reduce both flooding and wildfire-related debris flows.	Placer County Department of Public Works and the Placer County Flood Control and Water Conservation District. Loomis Town Manager

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Wellhead Protection	Mitigates hazards by preventing groundwater contamination, focus on the natural hazard of **water pollution,** and support resilience through land-use limits and protective zones around drinking water wells.	Advocating for buffer zones free of hazardous materials, stricter controls on fuel storage and chemical use near wells, and integration of fire suppression water supplies with groundwater protection standards. The District can also work with Placer County and Loomis to ensure post-fire runoff and debris are managed to prevent groundwater contamination, tying drinking water safety directly to hazard mitigation.	Placer County Environmental Health Division Loomis Public Works and Town Engineer
Emergency Management Ordinance	Requires emergency operations planning, coordinating disaster response, and locating critical facilities outside high-risk hazard zones; it does mention hazards like flood, wildfire, seismic, slope failure; and it establishes resilience standards for essential facilities and operations.	Pushing for clearer authority in wildfire and flood response, requiring up-to-date evacuation and sheltering plans, and ensuring new developments integrate emergency access, communication, and resource needs. In both Placer County and Loomis, tying ordinance updates directly to hazard mitigation plans helps make emergency management more proactive and resilient.	Placer County Office of Emergency Services and the Board of Supervisors. Loomis Town Manager and Council CA Health and Safety Code
Climate Change Ordinance	Placer County's Sustainability Plan and the related updates to its General Plan Safety/Health element recognize hazards like drought, wildfire, flooding, severe weather and establish climate adaptation/resilience goals and policies, but don't themselves impose binding resilience codes	Promoting requirements that link new development to hazard resilience—such as stronger wildfire-resistant construction, defensible space, water conservation, and green infrastructure that reduces both heat and flood risks. Aligning climate policies with hazard mitigation planning also ensures growth adapts to increasing wildfire intensity, extreme weather, and long-term community safety needs.	Placer County CDRA and the Board of Supervisors. Loomis Planning Department CA Health and Safety Code
Open Space and Conservation Program	The Placer County Open Space / Conservation Program (PCCP) *doesn't* explicitly name most natural hazards like wildfire or flood in its purpose, but it *does* contribute to resilience by protecting aquatic resources, habitat, and stream/stream system buffers (including 100-year floodplains) as part of its land conversion, mitigation, and reserve system standards	Advocating its use as defensible space, wildfire buffers, and natural floodplains. By advocating for maintaining fuel-reduced greenbelts, protecting riparian corridors for flood control, and integrating habitat areas into evacuation and fire-break planning, districts in Placer County and Loomis can tie open space preservation directly to hazard mitigation and community safety.	Placer County Conservation Authority and Placer County Conservation Program. Loomis Planning Department

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
Other Code, Ordinance, or Regulation Related to Natural Hazards	Other Placer County codes *do*: for example the Building Code enforces seismic design, snow-load, and wildland-urban interface (WUI) construction standards for fire hazard zones; the General Plan's updated Health & Safety Element identifies multiple hazards (seismic, flood, fire, etc.) and adopts resilience/adaptation policies; and the Fire Hazard Severity Zone regulations require defensible space, home hardening, and disclosure obligations in high fire hazard areas.	pushing for consistent updates that address emerging risks—such as requiring fire-safe roofs and siding, stricter evacuation road standards, debris flow and landslide protections, and coordination between zoning, building, and environmental codes. In both Placer County and Loomis, aligning these ordinances with hazard mitigation plans ensures safer development and stronger community resilience.	Placer County CDRA and the Board of Supervisors. Loomis Town Council and Planning Department. CA Health and Safety Code

35.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 35-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 35-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Comprehensive/ Master Plan	Integrates hazard mitigation by identifying risks like wildfire, flood, and seismic hazards, and establishes resilience standards through land use, infrastructure, and safety policies.	Integrating FD input, hazard maps, WUI standards, and funding mechanisms to ensure development aligns with local fire protection and hazard-mitigation capacity.	Placer Co. – Planning Services Division Loomis – Town Planning Dept. and the Building Dept.
Capital Improvement Plan or Program	Supports hazard mitigation by prioritizing resilient infrastructure, may reference hazards like flooding or seismic risk in project design, and establishes resilience standards through upgrades to roads, drainage, and public facilities.	Prioritizing FD projects such as secondary access roads, water supply upgrades, and fire station expansions to strengthen hazard mitigation and emergency response capacity.	Placer Co. – Capital Improvements Division and the Facilities Management Dept. Loomis – Engineering Dept.
Floodplain Management or Watershed Plan	Mitigates flood hazards by restricting development in flood zones, directly addresses flooding as a natural hazard, and sets resilience standards through elevation, drainage, and watershed protection requirements.	By coordinating with FDs to ensure flood risks, access limitations, and water supply needs are addressed in emergency response and hazard-mitigation planning.	Placer Co. – Public Works Loomis – Town Manager

Name of Plan	Integration	Expand and Improve	Department Responsible
Stormwater Management Plan	Mitigates hazards by reducing flooding and water pollution, addresses natural hazards like stormwater runoff and erosion, and sets resilience standards through best management practices and regulatory controls.	No Authority to expand or improve	Placer Co. – Stormwater Quality Division Loomis – Engineering Dept.
Stormwater Pollution Prevention Plan	Mitigates hazards by controlling runoff and erosion, addresses natural hazards like flooding and water pollution, and sets resilience standards through best management practices for construction and post-development sites.	No Authority to expand or improve	Placer Co. – Public Works Stormwater Quality Division Loomis – Engineering and Public Works Depts.
Land Use Plan	Guides where development can occur, incorporates hazard areas like floodplains and wildfire zones, and establishes resilience standards through zoning, growth controls, and environmental protections.	Integrating FD input to protect emergency access, water supply, and response capabilities in flood-prone areas.	Placer Co. – Planning Services Division Loomis – Planning and Building Depts.
Open Space Plan	Aids hazard mitigation by preserving floodplains, wetlands, and wildfire buffers, acknowledges natural hazards tied to these lands, and promotes resilience through long-term land conservation standards.	Incorporating FD guidance to maintain defensible space, fuel breaks, and emergency access within preserved lands.	Placer Co. – Dept of Parks and Open Spaces Loomis – Planning Dept.
Community Wildfire Protection Plan	Directly addresses wildfire hazards, mitigates risk through fuels reduction and defensible space strategies, and sets resilience standards for communities in the wildland-urban interface.	Aligning directly with FD priorities for fuel reduction, evacuation planning, and sustainable funding for ongoing hazard-mitigation efforts.	Placer Co. – Office of Emergency Services Loomis – Planning Division
Community Forest Management Plan	Mitigates wildfire and erosion hazards, identifies natural risks tied to forest health, and sets resilience standards through sustainable forestry, fuels reduction, and habitat protection practices.	Incorporating FD expertise to prioritize fuels management, access routes, and long-term forest health strategies that reduce wildfire risk.	Placer Co. – Dept. of Agriculture, Parks & Natural Resources. Loomis – Planning Dept.
Transportation Plan	Supports hazard mitigation by planning safe evacuation routes and resilient infrastructure, references hazards like wildfire and flooding, and sets resilience standards through road, transit, and emergency access improvements.	Integrating FD input to ensure evacuation routes, road widths, and access standards support effective emergency response and hazard mitigation.	Placer Co. – Placer Co. Transportation Agency. Loomis – Public Works Dept./Engineering Div.
Climate Action/ Resiliency/Sustainability Plan	Addresses hazard mitigation by targeting wildfire, drought, flooding, and extreme heat, and establishes resilience standards through adaptation, emissions reduction, and sustainable land-use policies.	Incorporating FD strategies for wildfire adaptation, emergency response, and resilient infrastructure in high-risk areas.	Placer Co. – Planning Services Division Loomis – Planning and Building Depts.

Name of Plan	Integration	Expand and Improve	Department Responsible
Emergency Operations Plan	Mitigates hazards by coordinating disaster response, identifies natural hazards like wildfire, flood, and earthquakes, and sets resilience standards through emergency preparedness and continuity of operations.	integrating FD resources and expertise into evacuation planning, hazard response, and continuity of operations.	Placer Co. – Office of Emergency Services. Loomis – Town Manager and Fire/Emergency services.
Public Health Plan	Supports hazard mitigation by addressing health risks from natural hazards like wildfire smoke, heat, and disease, and builds resilience through preparedness, response, and community health standards.	Partnering with FDs to address health impacts from wildfire smoke, heat emergencies, and disaster response.	Placer Co. – Health and Human Services Dept. Loomis – Code Enforcement
Other Emergency Plan	Outlining specific responses to floods, wildfires, and severe weather, mention these natural hazards directly, and establish resilience standards through preparedness, response coordination, and recovery strategies.	Integrating FD coordination to enhance evacuation, response capabilities, and community hazard resilience.	Placer Co. – Office of Emergency Servies Loomis – Planning Dept.

The above mitigation and response plans have already been integrated into the MJHMP, as described in the Placer County and Town of Loomis annexes. South Placer FD does not currently maintain any plans that are integrated with the MJHMP. As the plans are developed and updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects, can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

35.5.3 Development and Permitting Capability

South Placer FD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

35.5.4 Administrative Capability

Table 35-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 35-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Planning Board/Commission	Design review and approval responsibilities
Planning Department	Design review and approval responsibilities
Open Space Board/Committee	Ability to support hazard mitigation projects
Economic Development Commission/Committee	Design review and approval responsibilities
Public Works/Highway Department	Design review and approval responsibilities
Construction/Building/Code Enforcement Department	Design review and approval responsibilities
Emergency Management/Public Safety Department	Design review and approval responsibilities
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Oversight or relation to one of the plan's identified hazards
Mutual aid agreements	Design review and approval responsibilities

35.5.5 Technical Capability

Table 35-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 35-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Engineers or professionals trained in building or infrastructure construction practices	Specific expertise or training related to hazard mitigation
Staff with expertise or training in benefit/cost analysis	Experience working on mitigation projects and initiatives
Full-Time Building Official	
Emergency Manager	Specific expertise or training related to hazard mitigation
Grant Managers and/or Writer(s) ***Consider the following:*** • ***Are data and maps from the MJHMP used to support documentation in grant applications?***	Experience working on mitigation projects and initiatives

35.5.6 Fiscal Capability

Table 35-6 summarizes financial resources available to South Placer FD.

Table 35-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Community development Block Grants (CDBG, CDBG-DR, CDBG-MIT)	Can reduce risk in FD by funding infrastructure, hazard-mitigation projects, and community resilience improvements such as safer housing and emergency facilities. However, budget limitations often restrict spending and may discourage projects that would otherwise support development in hazard-prone areas.
Capital improvements project funding	By supporting critical infrastructure such as fire stations, water systems, and evacuation routes that strengthen emergency response and hazard mitigation. Budget constraints, however, can limit these investments and may restrict projects that would otherwise facilitate development in high-risk hazard areas.
Authority to levy taxes for specific purposes	Allows FDs to secure dedicated funding for hazard-mitigation measures such as defensible space, equipment, and facility upgrades, directly reducing risk. Yet, budgetary limits can still restrict expenditures and discourage investment in projects that promote development in vulnerable hazard areas.
Impact fees for homebuyers or developers of new development/homes	Help fund essential infrastructure, equipment, and mitigation measures needed to protect new growth, thereby reducing risk. However, budget constraints can still limit how much is allocated and may restrict projects that would otherwise encourage development in hazard-prone areas.
Other federal or state Funding Programs	Can bolster FDs' risk reduction by financing wildfire mitigation, resilient infrastructure, and emergency preparedness projects. Still, limited budgets and strict funding priorities may restrict spending and discourage development in areas highly vulnerable to natural hazards.

35.5.7 Education and Outreach Capability

Table 35-7 summarizes the education and outreach resources available to South Placer FD.

Table 35-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Hazard mitigation information available on your website	This is not currently done but could be included.
Social media for hazard mitigation education and outreach	This is not currently done but could be included.
Community newsletter	This is not currently done but could be included.
Local news	Conducting press releases for programs or local FD involvement in mitigation efforts or projects.
Hazard awareness campaigns (Severe Weather Awareness Week, public events)	Fire Prevention Week and participating in local safety fairs, national night out, and attendance of local HOA meetings.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	The District has Red Flag Warnings at all Stations on High-Risk Fire Days. The District also participates in local safety fairs and conduct open houses in all of the Fire Stations monthly.

35.5.8 Community Classifications

Table 35-8 summarizes classifications for community programs available to South Placer FD.

Table 35-8. Community Classifications

Program	Participating?	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	2 /2Y	February 2024
Firewise Communities classification	Yes	-	-

35.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 35-9 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 35-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Weak
Earthquake	Weak
Flood	Moderate - Able to respond to localized flooding during heavy rainstorms.
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Weak
Heavy Rains and Storms	Moderate - Able to respond to and assist the community during heavy rains which may affect roadways, trees, and powerlines.
High Winds and Tornadoes	Weak
Wildfire	Strong

35.6 National Flood Insurance Program Compliance

South Placer Fire is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

35.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of South Placer FD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

35.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 35-3 through Figure 35-7. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which South Placer FD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 35-3. Dam Inundation Hazard Area

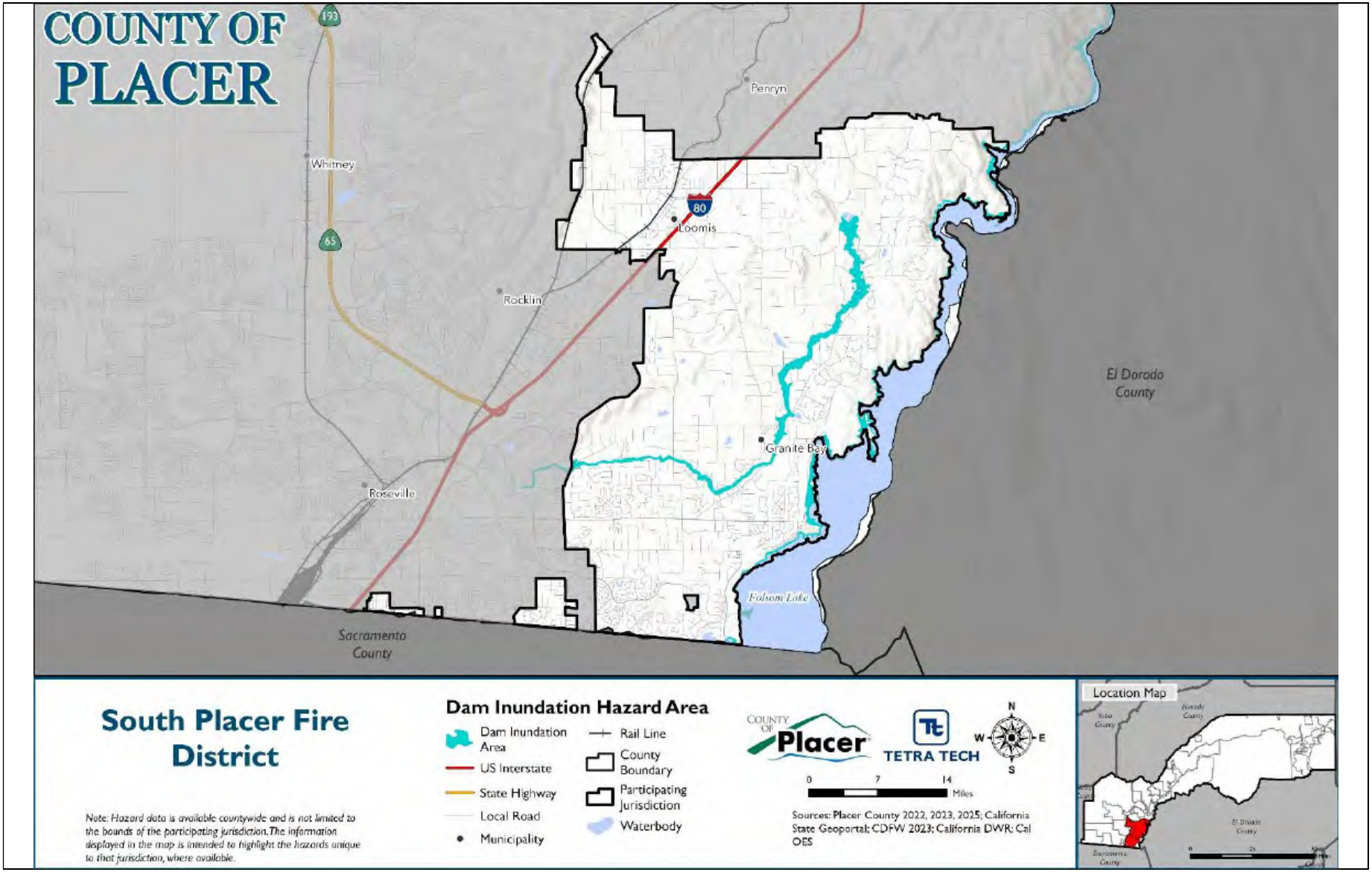


Figure 35-4. Flood Hazard Area

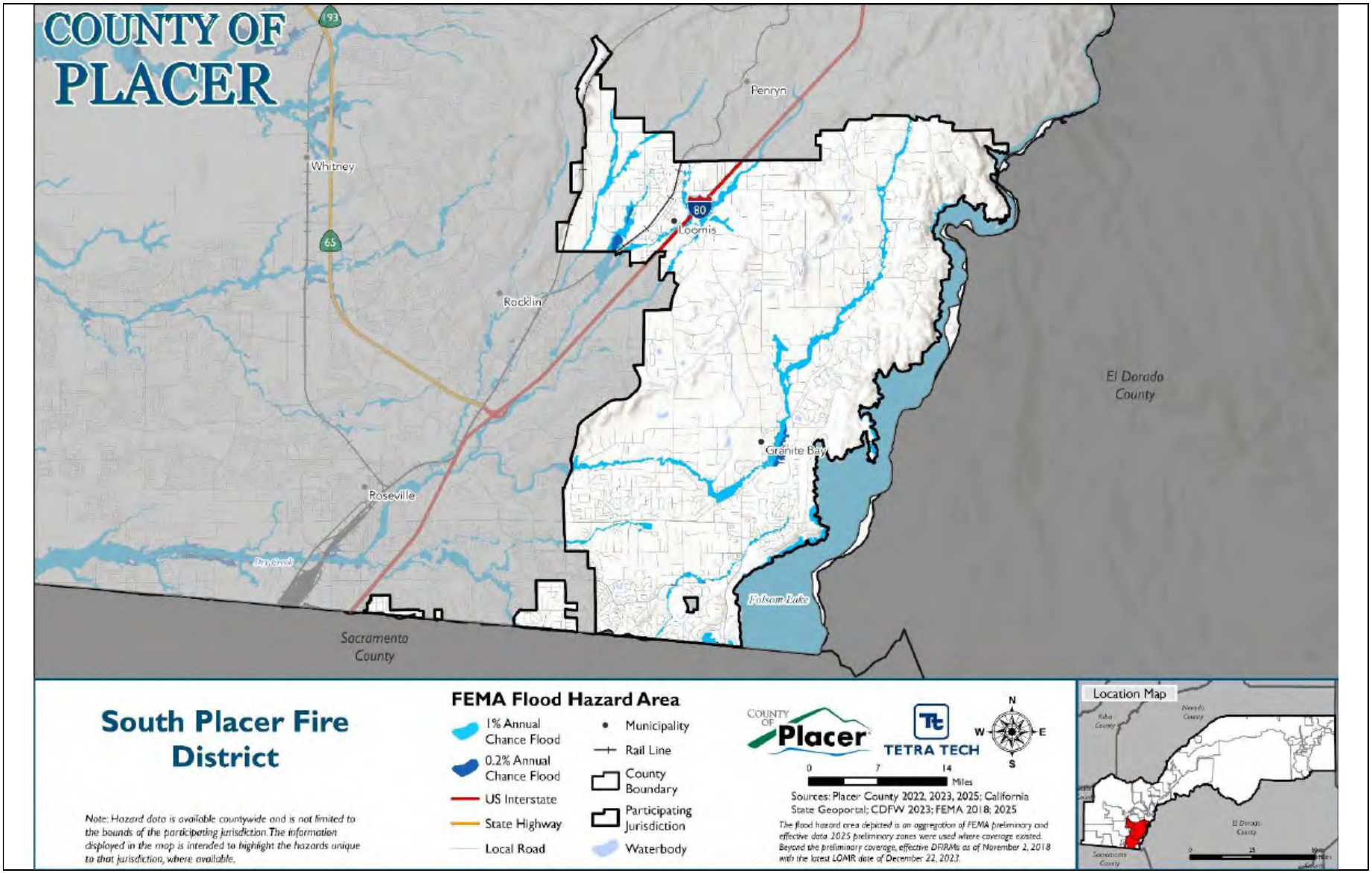


Figure 35-5. Landslide Hazard Area

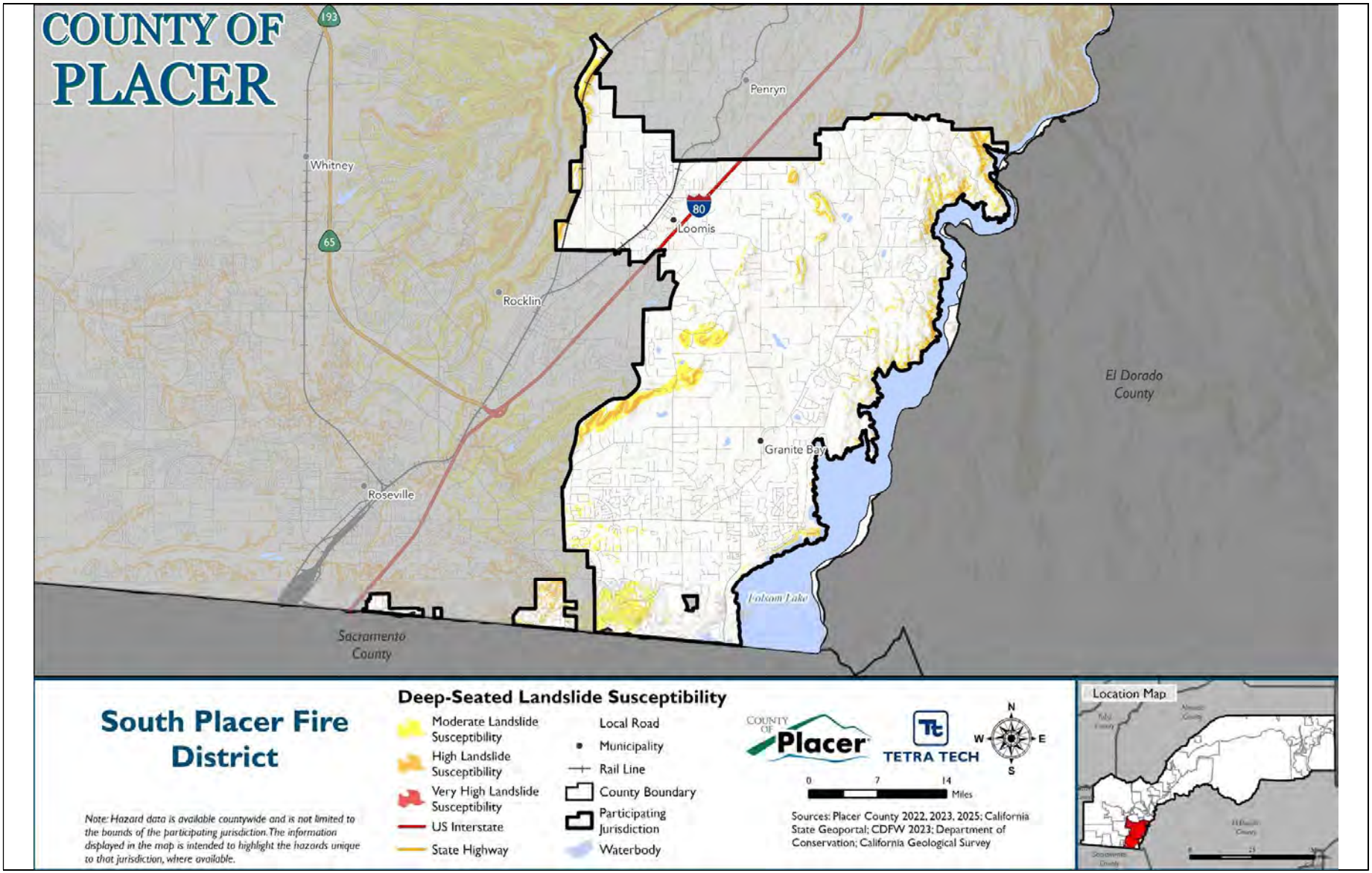


Figure 35-6. NEHRP Soil Class D Hazard Area

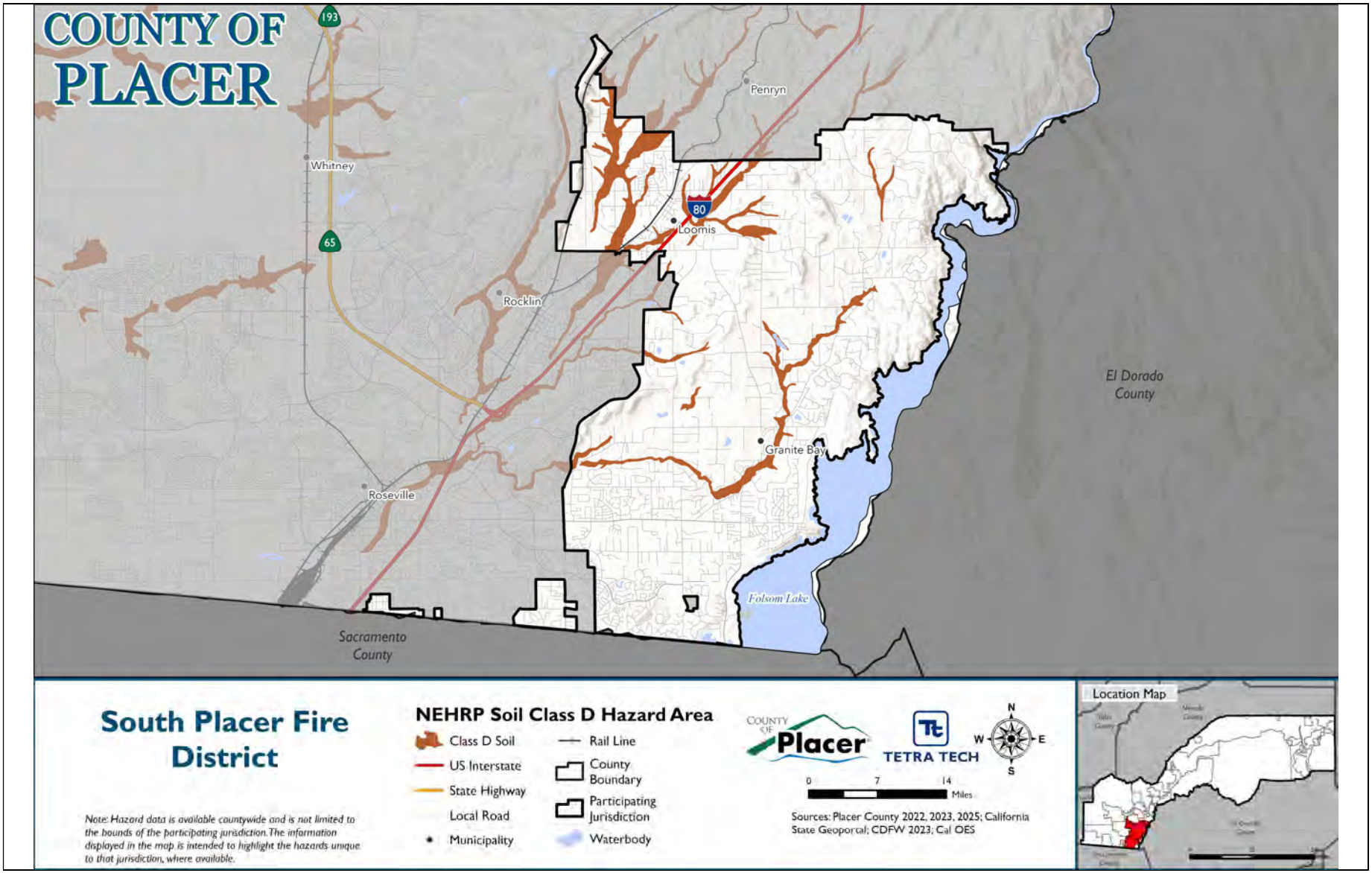
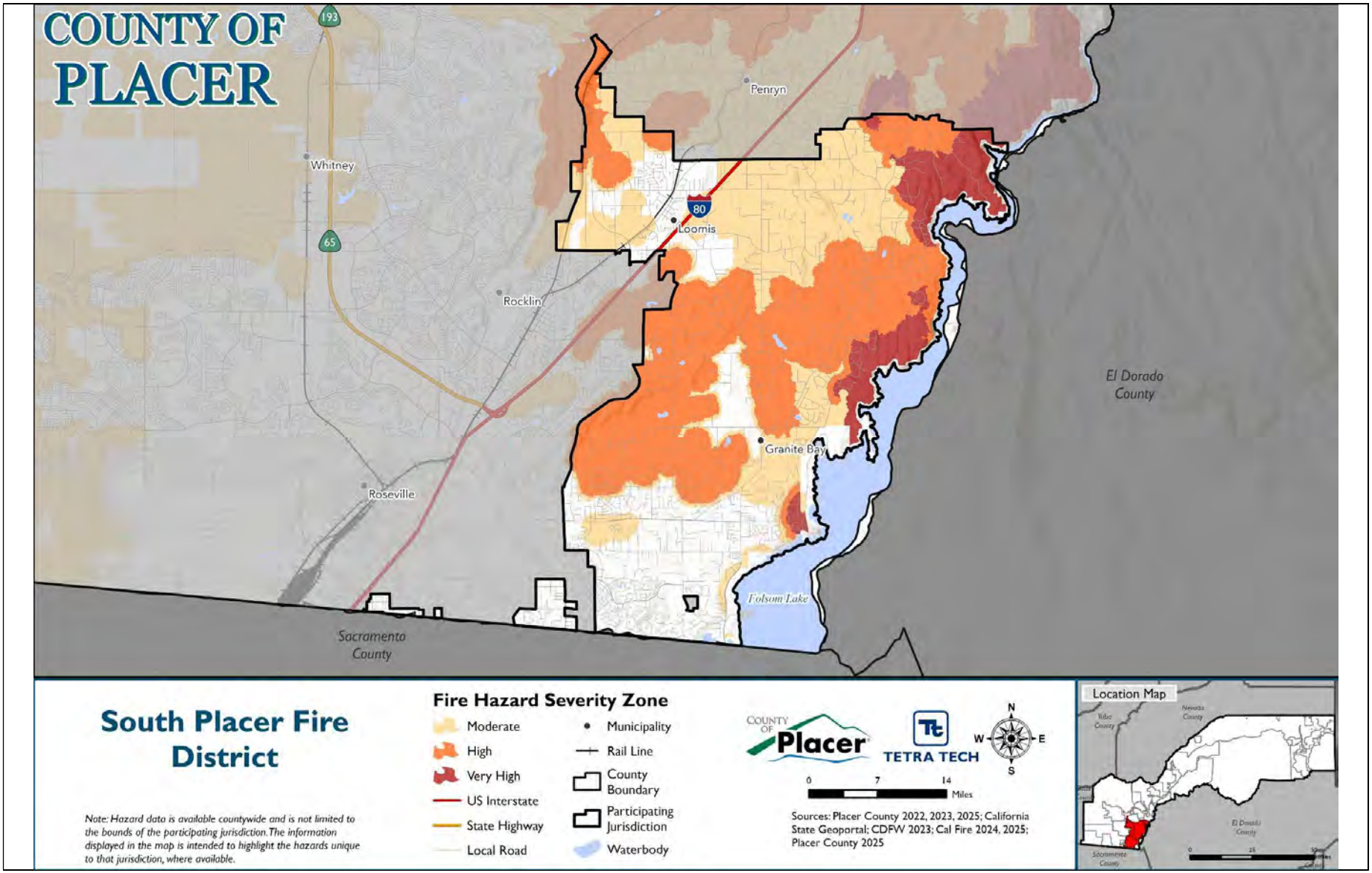


Figure 35-7. Wildfire Hazard Area



35.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 35-10 provides details on loss and damage in South Placer FD during hazard events since the last hazard mitigation plan update.

Table 35-10. Hazard Event History in South Placer FD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
February 9, 2020	February 9, 2020	Strong Wind	An area of low pressure slid down the Sierra Nevada while high pressure built over the region to the east. This allowed for strong northerly winds to set up across much of northern California with gusts ranging from 30 to 65 miles per hour. Various media outlets and members of the public reported wind damage including but not limited to uprooted trees, downed power lines, blown over fences, and loose and unsecured objects tossed around.	- Down power lines - Uprooted Trees - Increased vehicle accidents
August 14, 2020	August 20, 2020	Excessive Heat	A prolonged and significant heat wave occurred in mid-August due to high pressure parked over California. High temperatures soared between 100 to 115 degrees for much of the Valley and lower elevation foothills, while higher elevation areas in the mountains range from the mid-80s to low 100s. Overnight lows were oppressive during this time frame as well, with Valley and foothill locations holding in the 70s to low 80s. Many emergency room visits were recorded in the Sacramento area in addition to 3 confirmed heat related deaths.	Several reports of heat related illnesses.
August 18, 2020	August 23, 2020	Excessive Heat	A heat wave was forecast for the initial part of this event; however, with many massive wildfires over northern California, intense heating was suppressed to wildfire smoke. Temperatures still rose to the mid-90s and low 100s, which was not much of a reprieve from the previous week's temperatures. A heat related death occurred during this time frame on August 22.	Several reports of heat related illnesses.
October 25, 2020	October 27, 2020	High Wind	A powerful offshore wind event unfolded from October 24 through October 27th as a upper level trough slid into the Great Basin area and high pressure filled in its wake. In combination with the winds, low relative humidity values and dry fuels would lead to extreme weather conditions during this time frame. Most of the damage reports from this event came from the foothill and mountain locations via a utility company. They noted that were 126 instances of wind related damages or hazards across northern California. 49 of them are estimated to be within NWS Sacramento's county warning area, which are estimated from the map provided online. Peak wind gusts across the Valley were generally in the 35 to 50 mph range. Mesonet stations across zone 69 reported peak wind gusts between 45 and 73 mph; however, stronger gusts up to 119 mph were observed at elevations above 8000 feet. Additionally, a local utility company reported 22 instances of wind related damages or hazards within the zone.	- Down powerlines - Uprooted Trees - Increased vehicle accidents

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 13, 2021	December 13, 2021	High Wind, Winter Storm	A weather system brought winter weather to the Sierra Nevada and southern Cascades. Reports of 52 to 66 inches of new snow were received. Low elevation snow also occurred with snow accumulation reported down to approximately 2,500 feet in elevation in the western foothills of the Sierra Nevada. Chain controls were in place on Interstate 80 and Highway 50 during the event. Traffic was also briefly closed to through traffic on I-80 for 34 minutes on the 13th due to downed powerlines. A rock slide also closed state route 70 at 3:30 am on the 13th. Highway 49 was closed during the event due to a down tree. Power outages were also reported across the region. Several counties also opened warming centers for the cold temperatures. High winds caused a significant amount of trees and powerlines to fall across the area causing widespread power outages leading to tens of thousands of people left without power, roadways were closed and blocked, and dangerous driving conditions were observed including a vehicle struck by a powerline.	-Down powerlines -Uprooted Trees -Increased vehicle accidents
December 21, 2021	December 28, 2021	Strong Wind	Several high impact winter storms impacted the region around the Christmas holiday. Widespread precipitation, low snow levels of 500 to 2500 feet, and strong and damaging winds resulted. Impacts ranged from fallen trees, downed power and phone lines, with widespread and extended outages, treacherous driving conditions including chain controls and extended highway closures due to wind and/or snow, multiple accidents and spin outs due to snow, damaged property due to snow and wind. Governor Gavin Newsom declared a state of emergency in 20 California counties due to the impacts from the series of storms. The affected areas include: El Dorado, Nevada, Placer, Sacramento and Yuba counties, but also Los Angeles and parts of the Bay Area. As of 12/29 1300 hours, Cal-OES estimated that the late December storm damages to roadway infrastructure total $22.2 million. Warming centers were also opened across the region for those impacted by the stormy weather	-Down powerlines -Uprooted Trees -Increased vehicle accidents
September 7, 2022	September 30, 2022	Wildfire	The Mosquito Fire began in Placer County 4 miles east of Foresthill near Mosquito Ridge Road, CA, and close to Oxbow Reservoir the evening of September 6, 2022, at 6:27 PM PDT and later spread into El Dorado County. Extreme fire behavior was observed due to the very dry humidity and fuels, with the fire developing large plumes that radar indicated extended up to 40,000 feet. In the first few days, the fire saw rapid growth at 5,705 acres by 7 pm PDT on the 7th and 13,705 acres by 8 pm PDT on the 8th. More than 11,000 people were evacuated and 9,000 structures were threatened. The fire included areas in both the Tahoe and Eldorado National Forests. The fire burned a total of 76,788 acres and caused road closures throughout the area. There were 2 firefighters injured during the fire. A total of 78 structures were destroyed and an additional 13 buildings were damaged in the towns of Foresthill, Volcanoville, and Michigan Bar. Periods of moderate to heavy rain from September 18-21 largely halted fire growth, but the fire was not considered fully contained until October 22.	- Sent crews to assist

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	-Down powerlines -Uprooted Trees -Localized Flooding -Increased vehicle accidents
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	-Down powerlines -Uprooted Trees -Localized Flooding -Increased vehicle accidents
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	-Down powerlines -Uprooted Trees -Localized Flooding -Increased vehicle accidents

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and 5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	-Down powerlines -Uprooted Trees -Localized Flooding -Increased vehicle accidents
March 27, 2023	March 29, 2023	Heavy Snow	A strong winter storm brought moderate to heavy rain with flooding of roadways, streams and creeks, with mudslides also reported. In the mountains there were wind gusts up to 50 to 70 mph, which coupled with heavy snow, brought whiteout conditions. The were numerous road closures, including Interstate 80, as well as State Routes 88, 89 and 299. Widespread trees down across the area blocked roads and caused power outages. Ski resorts reported storm total snow amounts of 23 inches at Kirkwood, 19 inches at Sugar Bowl, and 17 inches at Sierra at Tahoe. Caltrans District 3 reported storm total snow amounts of 23.5 inches at Kingvale, 21 inches at Soda Springs, and 18 inches at Eagle Lakes. The National Operational Hydrological Remote Sensing Center's gridded snowfall analysis estimated 6 to 30 inches over the west slope northern Sierra Nevada over 72 hours. 1 death was reported by broadcast media in Alta, CA where a man died from a collapsed snowbank, trapping him next to a generator and exposing him to carbon monoxide. Interstate 80 closed intermittently on 3/28 due to winter weather conditions and multiple spinouts.	-Down powerlines -Uprooted Trees -Localized flooding -Increased vehicle accidents
January 31, 2024	January 31, 2024	Strong Wind	An active weather pattern brought gusty winds with downed trees, heavy rain and mountain snow with mountain travel delays and chain restrictions, and isolated thunderstorms to end the month of January, and continued into early February. California Highway Patrol reported multiple large branches down on eastbound Interstate-80. They also reported a tree down, blocking the road at Courtland Road and Morse Road. Auburn Municipal Airport reported a max gust of 41 mph.	-Down powerlines -Uprooted Trees -Localized Flooding

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
February 4, 2024	February 5, 2024	High Wind, Flood	A major winter storm moved in from the south on February 4th, bringing heavy rain, strong winds, thunderstorms and heavy mountain snow through February 7th. Damaging winds brought down trees and caused widespread power outages. Flooding and strong winds resulted in multiple fatalities. Chain controls were observed in the mountains. Heavy rain brought nuisance flooding on roads and urban areas and rises to rivers, creeks and streams, with generally 1 to 3 inches of storm total rain reported across the Valley and foothills. Numerous reports of downed power lines and trees across the area, closing roads and damaging cars. California Highway Patrol and Placer County OES reported the fatality of a driver. Nevada County Air Park reported a max gust of 52 mph. Nevada County OES reported widespread power outages and downed trees across roads and into structures, with moderate impacts to telecommunications. El Dorado County OES reported 40 calls for service related to trees and wires down, at least 5 buildings struck by trees, and 1 uninjured person trapped in a mobile home from a tree on top of the home.	-Down powerlines -Uprooted Trees -Localized Flooding -Increased vehicle accidents
July 2, 2024	July 13, 2024	Excessive Heat	A long-duration heat event brought dangerously hot conditions with widespread Major to Extreme Heat Risk to interior Northern California over the first two weeks of July. Multiple temperature records were broken or tied over this timeframe. The Sacramento County Coroner reported two fatalities due to the extreme heat, one on July 6th and one on July 7th. Temperatures cooled slightly for a brief period in the Southern Sacramento Valley, Delta and Carquinez Strait, and Northern San Joaquin Valley on July 8th and 9th, but conditions were still hot, before ramping up again on July 10th. Dangerously hot daytime high temperatures of 100 to 115 degrees were observed from July 2nd through July 13th. Little relief from the heat was observed overnight, with low temperatures around the 60s to mid-70s over the same timeframe. Temperatures cooled slightly on July 8th and 9th, but conditions were still hot. Temperatures ramped back up again on the 10th and continued through the 13th.	-Heat related illnesses
December 14, 2024	December 14, 2024	Strong Wind	Active weather brought periods of heavy mountain snow, rain and gusty winds from December 12th through December 17th as multiple storms moved through the area. The strongest storm moved through over the December 13th through 14th timeframe and brought over 2 to 3 inches of rain, over 2 feet of heavy snow above 5000 feet, and gusty southerly wind gusts of 35 to 65 mph. Numerous downed trees and thousands of power outages were reported during this time, along with mountain highway closures and chain restrictions, with roadway flooding in the Central Valley. California Highway Patrol reported a tree down on powerlines from gusty southerly winds.	-Down powerlines -Uprooted Trees -Localized Flooding -Increased vehicle accidents

35.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is

based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

South Placer FD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- Heavy rains and storms hazard ranking were increased from low to medium due to localized low lying flooding and road closures.

Table 35-11 shows South Placer FD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 35-11. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Low
Freeze and Snow	Low
Heavy Rains and Storms	Medium
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Low
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

35.7.4 Vulnerability Assessment

Table 35-12 lists issues related to the top hazards of concern for South Placer FD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 35-12. Hazard Issues

Issue	Related Hazard
The dry vegetation on the shores of Folsom Lake would fuel a wildfire and endanger homes that border the lake.	Wildfire
While many property owners in the district are aware of the risk of wildfire, they are often unaware of defensible space and wildfire mitigation statutes and best practices.	Wildfire
With rain episodes becoming less frequent but more intense, the district must prepare for conducting emergency operations during a major storm.	Heavy Rains and Storms
During episodes of extreme temperatures, there is an increase in the number of emergency calls because residents are unaware of the risk posed by both extreme heat and extreme cold.	Freeze and Snow

35.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 35-13 describes the potential impacts of the hazards of local concern to South Placer FD (hazards identified as medium or high risk in Table 35-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

Table 35-13. Hazard Impacts

Hazard	Potential Impacts
Heavy Rains and Storms	Heavy rainfall can trigger localized flooding, soil erosion, and hazardous road conditions. These events often lead to increased vehicle accidents and may require emergency crews to manage blocked routes and protect vulnerable areas. High travel roadways such as Douglas Blvd. and Auburn Folsom Rd. are particularly vulnerable.
Wildfire	Wildfires pose a significant risk to populated areas, increasing fire load adjacent to homes and threatening critical infrastructure. Despite pre-planned emergency response measures, wildfire events can lead to property loss, evacuations, and heightened danger to residents and responders. As identified by the updated Fire Severity Zone mapping completed by Cal Fire, the area east of Auburn Folsom Rd between it and Folsom Lake is in a high fire severity zone and is one of the District's most vulnerable areas.

35.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect South Placer FD's overall vulnerability since the previous plan was approved.

35.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

35.8.1 Changes in Community Priorities

The District's priorities have shifted toward proactive risk reduction and infrastructure resilience. Emphasis is placed on managing vegetation in open spaces to reduce wildfire risk, creating strategic

fuel breaks to protect communities, and addressing vulnerabilities related to levee integrity and potential flooding. Additionally, the District is prioritizing preparedness for extreme weather conditions, including temperature fluctuations and heavy rainfall, to ensure continuity of operations and safeguard public safety. These priorities reflect a comprehensive approach to mitigating hazards and enhancing the community's ability to withstand and recover from diverse threats.

35.8.2 Past Mitigation Action Status

Table 35-14 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 35-14. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	Partner with our neighbors at Placer County Code Enforcement to enforce State Law regarding defensible space to reduce the rapid spread of wildfire. Vegetation will be removed to protect grasslands and oak woodlands. This vegetation competes with trees and green plants.	Vegetation Management in Open Space Areas	Not Complete	Yes	-
2	Partner with our neighbors at CalFire, State Parks, and the Bureau of Reclamation to create a shaded fuel break along the lake and help protect the home that back up to this area.	Shaded Fuel Break along west shore of Folsom Lake - Granite Bay	Not Complete	Yes	-
3	Add Emergency Backup Generators to South Placer FD Stations 15,16 and 17.	Backup Generator Installation for Fire Stations	Complete	No	Generators installed.

35.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, South Placer FD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Strengthened Development Standards & Fire Code Enforcement
- Expansion of Residential & Commercial Fire Sprinkler Requirements
- Vegetation Management & Weed Abatement Program Enhancements
- Improved Wildland Urban Interface (WUI) Construction Standards
- Enhanced Development Review Collaboration With Placer County & Town of Loomis
- Created Community Facilities District (CFD) for Fire Mitigation
- Pre-Incident Planning, GIS Mapping, and Water Supply Improvements

- Public Outreach & Risk-Communication Improvement
- Fuels Reduction & Vegetation Collaboration With Regional Partners

35.8.4 Hazards Omitted from Mitigation Strategy

SPFD omitted avalanche from its mitigation strategies due to its lower elevation and lack of significant snowfall. Drought and water shortage, earthquake, flood, high winds and tornadoes, and landslides, mudslides, and debris flow were omitted due to the District's lack of capabilities to mitigate these hazards.

35.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that South Placer FD would like to pursue in the future to reduce the risk from hazards.

Table 35-15 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 35-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	X	-	-	-
Drought and Water Shortage	-	-	-	-
Earthquake	-	-	-	-
Flood	-	-	-	-
Freeze and Snow	-	-	-	X
Heavy Rains and Storms	X	-	-	-
High Winds and Tornadoes	-	-	-	-
Landslides, Mudslides, and Debris Flows	-	-	-	-
Wildfire	-	X	-	X

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 35-16 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 35-16. Mitigation Strategy Prioritization

Action Number	Project Name4	Objectives Met	Timeline	Benefits	Costs	Score	Priority
SPFD-01	Shaded Fuel Break Along Folsom Lake	5	1-5 Years	High	Medium	8.25	High
SPFD-02	Vegetation Management in Open Space Areas	4	1-5 Years	High	Medium	8	Medium
SPFD-03	Rain and Storm Response Plan	4	1-5 Years	Low	Low	7	Medium
SPFD-04	Extreme Temperatures Awareness Campaign	3	1-5 Years	Low	Low	6.75	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

35.8.6 Mitigation Strategy

Table 35-17 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The South Placer FD Prevention Division will lead implementation of all projects listed in Table 35-17. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 35-17. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
SPFD-01	Shaded Fuel Break Along Folsom Lake	Partner with neighbors at CalFire, State Parks, and the Bureau of Reclamation to create a shaded fuel break along Folsom Lake and help protect the homes that back up to this area.	Wildfire	US Bureau of Reclamation, CAL FIRE, California State Parks	General Fund & Staff Time
SPFD-02	Vegetation Management in Open Space Areas	Partner with neighbors at Placer County Code Enforcement to enforce State Law regarding defensible space to reduce the rapid spread of wildfire. Vegetation will be removed to protect grasslands and oak woodlands. This vegetation competes with trees and green plants.	Wildfire	Placer County Code Enforcement	General Fund & Staff Time
SPFD-03	Rain and Storm Response Plan	Develop and implement a heavy rain or storm response plan to identify roles and responsibilities, establish crisis communications protocols, and define a concept of operations for major storms.	Heavy Rains and Storms	Placer County Office of Emergency Services	General Fund & Staff Time
SPFD-04	Extreme Temperatures Awareness Campaign	The District will develop an outreach and awareness program to educate citizens on the dangers of extreme heat and cold, including the steps they can take to protect themselves when extreme temperatures occur.	Freeze and Snow	Placer County Office of Emergency Services, Listos California	General Fund & Staff Time

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
SPFD-05	Rain, Storms, and Flooding Public Outreach	Develop a public education and awareness program to educate the community about the risk from heavy rains and storms (flooded roads, soil erosion, dangerous road conditions). Messaging will be delivered by social media and flyers and will help the community to reduce their exposure (e.g., receiving alerts, “turn around don’t drown” awareness), and to reduce risks to the public from private property (e.g. improving drainage and detention, vegetation management, or landscaping for erosion control).	Heavy Rains and Storms, Flood	Placer County Office of Emergency Services, Listos California	General Fund & Staff Time

36. Tahoe City Public Utility District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist Tahoe City Public Utility District (Tahoe City PUD or the District) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Tahoe City PUD, describes who participated in the planning process, assesses Tahoe City PUD's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Countywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to Tahoe City PUD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

36.1 Hazard Mitigation Planning Team

Tahoe City PUD identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Dan Lewis, Director of Utilities

Address: 211 Fairway Drive, Tahoe City, CA 96145

Phone Number: 530-580-6330

Email: dlewis@tcpud.org

Alternate Point of Contact: Francisco Gonzalez, Utilities Superintendent

Address: 211 Fairway Drive, Tahoe City, CA 96145

Phone Number: 530-580-6330

Email: fgonzalez@tcpud.org

The Utilities Department represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization. Table 36-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 36-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Dan Lewis	Utilities	Director of Utilities	Agency rep
Francisco Gonzalez	Utilities	Utilities Superintendent	Agency rep, meeting attendance, annex completion
Jason Woosley	Utilities	Utilities Superintendent	Agency rep, meeting attendance, annex completion
Kay Berntson	Parks	Parks and Facilities Superintendent	Agency rep, meeting attendance, annex completion

36.2 Community Profile

The Tahoe City PUD was founded in 1938 to provide some of the needs of the residents of Tahoe City. It is the oldest local government in the Tahoe Basin and was formed initially to provide public water service to the local community. Established under the State of California's Public Utility District Act, the founders of the District chose a form of government that could provide multiple types of services.

The boundaries of the District extend from Emerald Bay to Dollar Hill, and along the Truckee River to the Nevada County line. The service area is very large, encompassing almost 22 square miles. The Tahoe City PUD's provides sewer collection, parks facilities, and recreation services for the entire area of the District. Water service is provided in four separate systems and serves approximately half of the homes and businesses in the District. Water service is provided to approximately 6,193 customers; sewer services to 7,800 customers; and parks and recreation customers total over 500,000.

36.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Tahoe City PUD completed the following specific activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

36.3.1 Outreach Activities

Tahoe City PUD conducted both virtual and in-person outreach to promote the MJHMP planning process to the public. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

The District posted MJHMP information on their website and social media pages. Engagement included collaboration with organizations such as Sierra Community House and the Tahoe Truckee Community Foundation to strengthen connections and ensure inclusive input in planning processes. Outreach efforts are shown in Figure 36-1 and Figure 36-2.

Figure 36-1. Virtual Public Outreach Activities

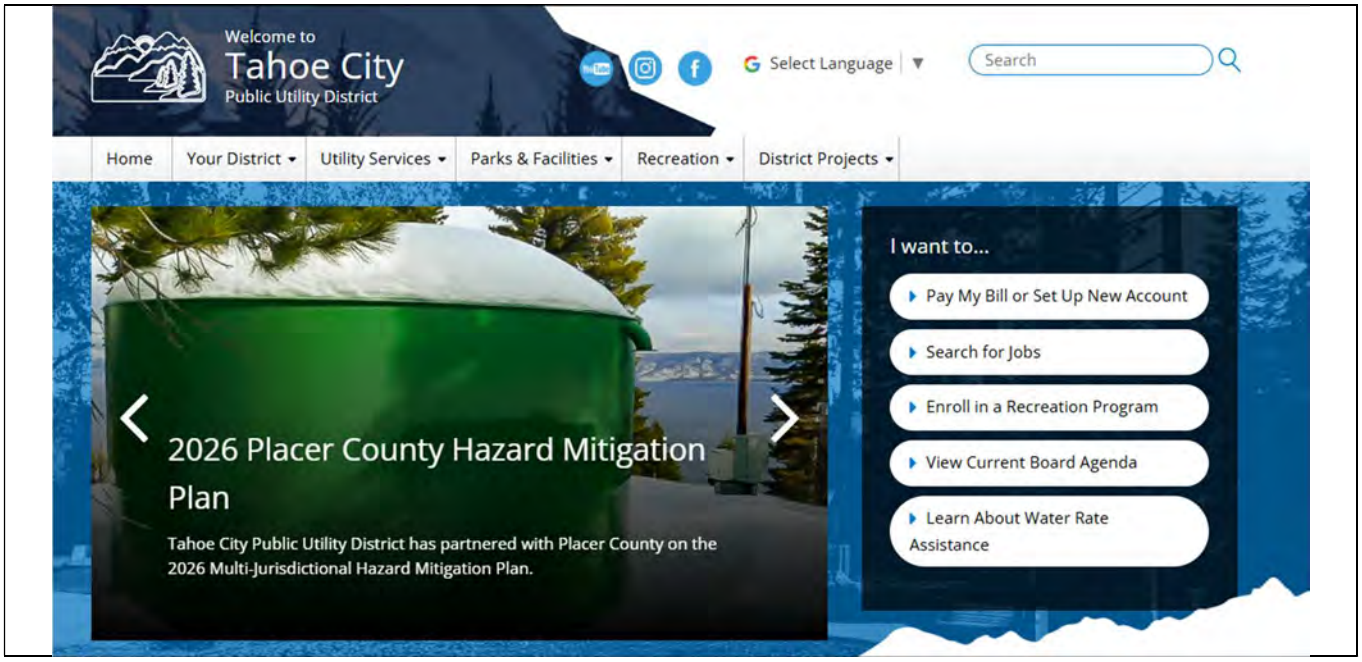
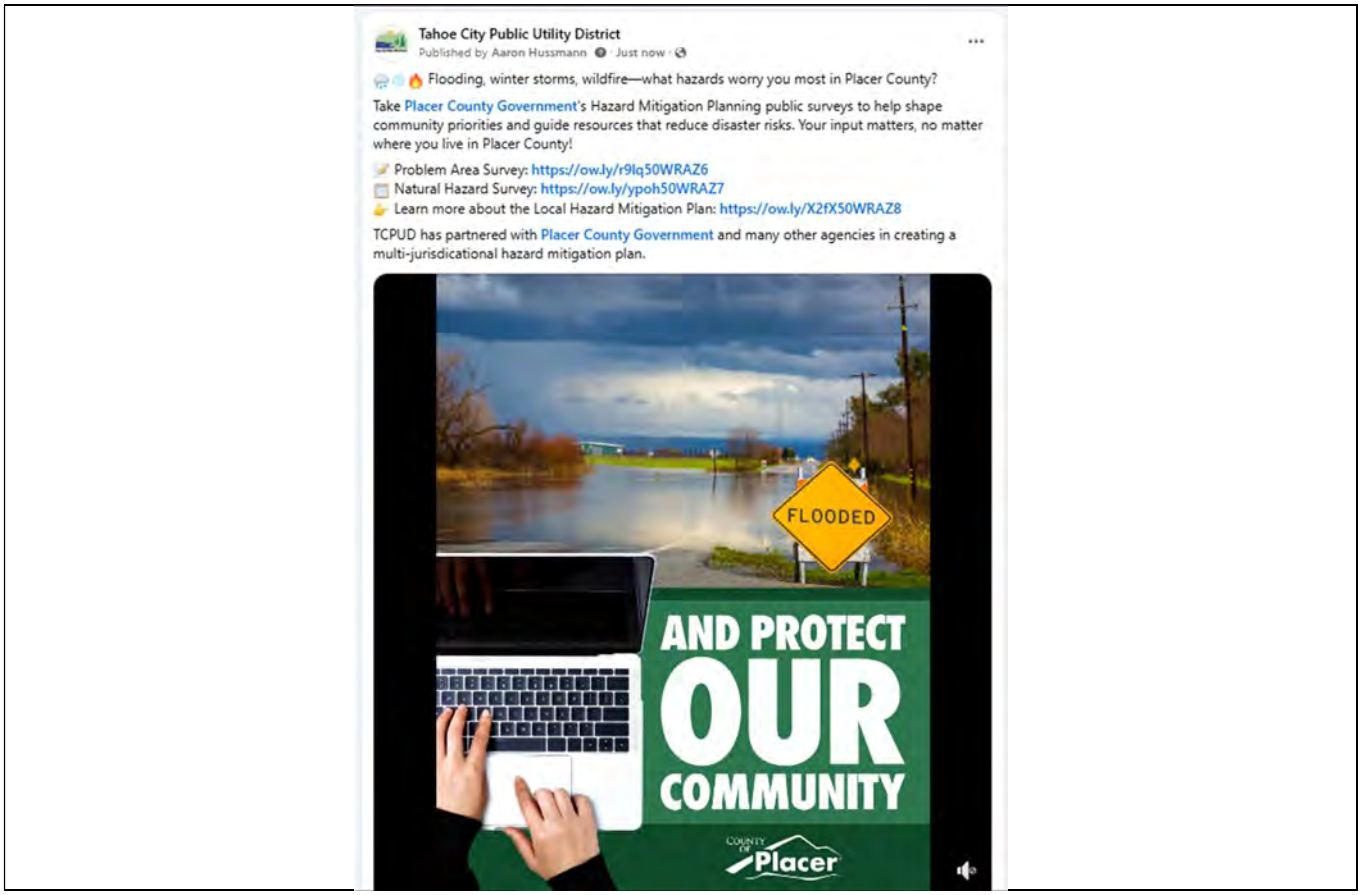


Figure 36-2. Social Media Outreach Activities



36.3.2 Public Feedback Integration

The District has not received any feedback.

36.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

36.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These stakeholders implement projects to reduce the impact of natural hazards on the people, buildings, economy, and environment of Placer County.

- North Tahoe Fire Protection District
- Placer County Health and Human Services

36.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders have their own jurisdictions with the authority to regulate their own zoning and planning.

- Placer County Community Development Resource Agency
- Tahoe Regional Planning Agency

36.4.3 Neighboring Communities

These stakeholders are critical agencies located in or around Tahoe City PUD.

- Donner Summit Public Utility District
- North Tahoe Public Utility District
- Truckee Donner Public Utility District

36.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are engaged in academia or the private sector in or around Tahoe City PUD.

- Tahoe Truckee Unified School District
- Truckee Chamber of Commerce

36.4.5 Nonprofit Organizations and Community-Based Organizations

These nonprofit and community-based organizations bring valuable local knowledge, resources, and community connections to the MJHMP process. Their engagement ensures that the perspectives of underserved populations, culturally significant lands, and hazard-prone communities are meaningfully incorporated into the planning effort.

- American Red Cross
- Tahoe Mountain Resorts Foundation
- Tahoe Truckee Community Foundation

36.5 Jurisdictional Capability Assessment

Tahoe City PUD performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Tahoe City PUD to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Tahoe City PUD lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

36.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 36-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 36-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code **Title 24, Part 2** **January 1, 2026**	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
Wellhead Protection: State regulated sanitary surveys performed annually	Protects drinking water sources from contamination, supporting resilience of critical infrastructure.	The District can improve wellhead protection by building on the annual state-regulated sanitary surveys, expanding groundwater monitoring, updating contamination source mapping as development grows, and increasing community outreach to promote best practices for protecting water quality.	Tahoe City PUD
Emergency Management Ordinance **2021 Emergency Response Plan**	Establishes disaster preparedness and response procedures, addressing multiple hazards and promoting resilience.	The District can strengthen the emergency management ordinance by referencing the Hazard Mitigation Plan, enhancing training and drills with utilities and responders, and adding continuity planning to keep critical services operational during disasters.	Tahoe City PUD

36.5.2 Planning Capability

The Hazard Mitigation Planning Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 36-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 36-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Capital Improvement Plan or Program	Plan includes projects that address hazards, and are included in mitigation strategies	Plan includes projects that address hazards, and are included in mitigation strategies	Tahoe City PUD
Urban Water Management Plan, 2020	Plans for water supply reliability and climate adaptation, reducing drought and extreme weather risks.	The District can strengthen the Urban Water Management Plan by incorporating resilience measures such as promoting drought-tolerant landscaping and water reuse systems, conducting scenario planning to address future climate impacts on water supply, and engaging the public through conservation programs and incentives.	Tahoe City PUD
Sewer System Management Plan	Maintains wastewater systems to prevent failures during hazards like flooding, enhancing public health resilience.	The District can improve the sewer system management plan by upgrading infrastructure and coordinating with stormwater management to minimize combined impacts.	Tahoe City PUD
Emergency Response Plan, 2021	Establishes disaster preparedness and response procedures, addressing multiple hazards and promoting resilience.	The District can strengthen the emergency management ordinance by referencing the Hazard Mitigation Plan, enhancing training and drills with utilities and responders, and adding continuity planning to keep critical services operational during disasters.	Tahoe City PUD
2025 Wildfire Emergency Response Plan	This project addresses wildfire hazard within Placer County. It contains mitigation actions and a mitigation strategy to reduce wildfire risk.	This plan underwent an update in 2025 and TCPUD participated in the planning process.	Tahoe City PUD

The District's capital improvement program and water management plans are primarily concerned with resilient infrastructure that enables consistent delivery for customers. These documents incorporate hazard-related policies and mitigation priorities related to heavy rainfall, drought, and flood, although they are not explicitly integrated with the MJHMP. As the program is updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

36.5.3 Development and Permitting Capability

Tahoe City PUD is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

36.5.4 Administrative Capability

Table 36-4 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 36-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
Emergency Management/Public Safety Department	Utilities/Risk Coordinator is trained on hazards and mitigation
Mutual aid agreements	TCPUD actively participates in a local mutual aid agreement with other agencies
Other	Fire and Security alarm. Telemetry for the sewer and water stations. Cell phone and radio communications.

36.5.5 Technical Capability

Table 36-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 36-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Engineers or professionals trained in building or infrastructure construction practices	Engineering/Senior Civil Engineer is trained on hazards and mitigation.
Planners or engineers with an understanding of natural hazards	Engineering/Senior Civil Engineer is trained on hazards and mitigation.
Staff with expertise or training in benefit/cost analysis	Director of Finance and Administration
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	GIS Administrator
Emergency Manager	Utilities/Risk Coordinator is trained on hazards and mitigation
Grant Managers and/or Writer(s)	Director of Strategic Affairs
GIS Coordinator/Analyst	Information Systems and Technology Administrator is trained on hazards and mitigation.

36.5.6 Fiscal Capabilities

Table 36-6 summarizes financial resources available to Tahoe City PUD.

Table 36-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Replacing or upgrading infrastructure
Authority to levy taxes for specific purposes	Replacing or upgrading infrastructure
User fees for water, sewer, gas, or electric service	Ongoing operation and maintenance
Impact fees for homebuyers or developers of new development/homes	Replacing or upgrading infrastructure
Incur debt through general obligation bonds	Replacing or upgrading infrastructure
Other federal or state Funding Programs	Both the Lake Tahoe Restoration Act and USFS Omnibus Funding have been used for Fuels Thinning and Water System Improvements to enhance fire protection capabilities. Future funding may be available pending approval of a new Lake Tahoe Restoration Act. WIFIA funding for infrastructure improvements
Other	Funding sources from Propositions 50 and 84 and the State Revolving Fund have been used for water and sewer system improvements improving fire protection capacity of the water system and sewer storage and pumping capacity of the sewer system. Future funding may be available in future Propositions as well as State Revolving Funds (SRF) pending approval of submitted projects.

36.5.7 Education and Outreach Capability

Table 36-7 summarizes the education and outreach resources available to Tahoe City PUD.

Table 36-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	Mgmt. Analyst, Public Affairs Specialist
Personnel skilled or trained in website development	Mgmt. Analyst, Public Affairs Specialist
Hazard mitigation information available on your website	Mgmt. Analyst, Public Affairs Specialist
Social media for hazard mitigation education and outreach	Mgmt. Analyst, Public Affairs Specialist
Community newsletter	Mgmt. Analyst, Public Affairs Specialist
Local news	Mgmt. Analyst, Public Affairs Specialist
Organizations that conduct outreach to socially vulnerable populations and underserved communities	Water rate assistance program
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens about natural hazards, risk, and ways to protect themselves during such events?	Social media, newsletters, community engagement

36.5.8 Community Classifications

Tahoe City PUD does not have formal classifications for community programs.

36.5.9 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 36-8 summarizes the adaptive capacity for each identified hazard of concern and the District's capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 36-8. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Weak
Dam and Levee Failure	Weak
Drought and Water Shortage	Moderate
Earthquake	Weak
Flood	Moderate
Landslides, Mudslides, and Debris Flow	Weak
Freeze and Snow	Moderate
Heavy Rains and Storms	Moderate
High Winds and Tornadoes	Weak
Wildfire	Moderate

36.6 National Flood Insurance Program

Tahoe City PUD is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

36.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Tahoe City PUD's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

36.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 36-3 through Figure 36-7. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Tahoe City PUD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included.

Figure 36-3. Avalanche Hazard Area

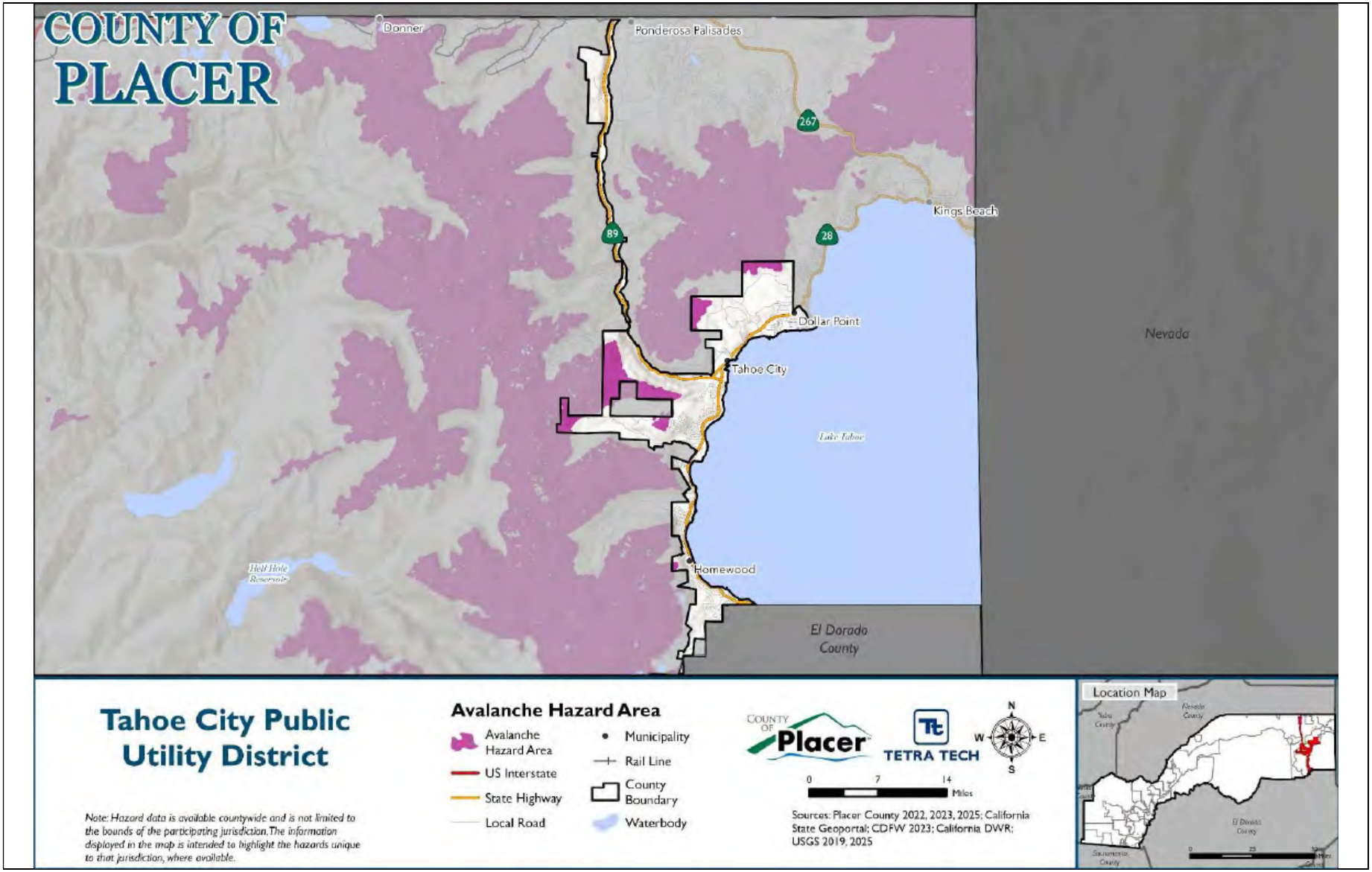


Figure 36-4. Flood Hazard Area

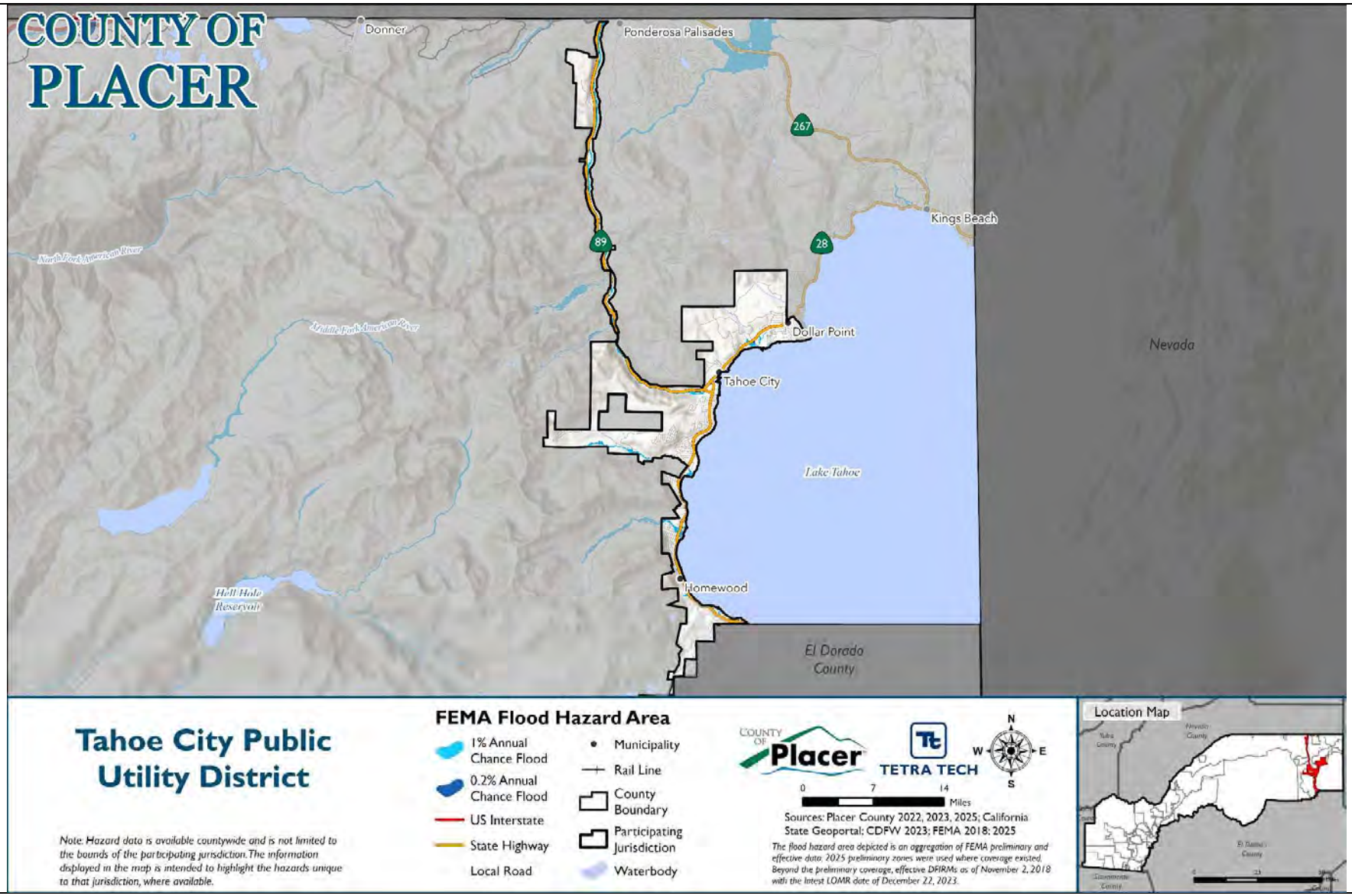


Figure 36-5. Landslide Hazard Area

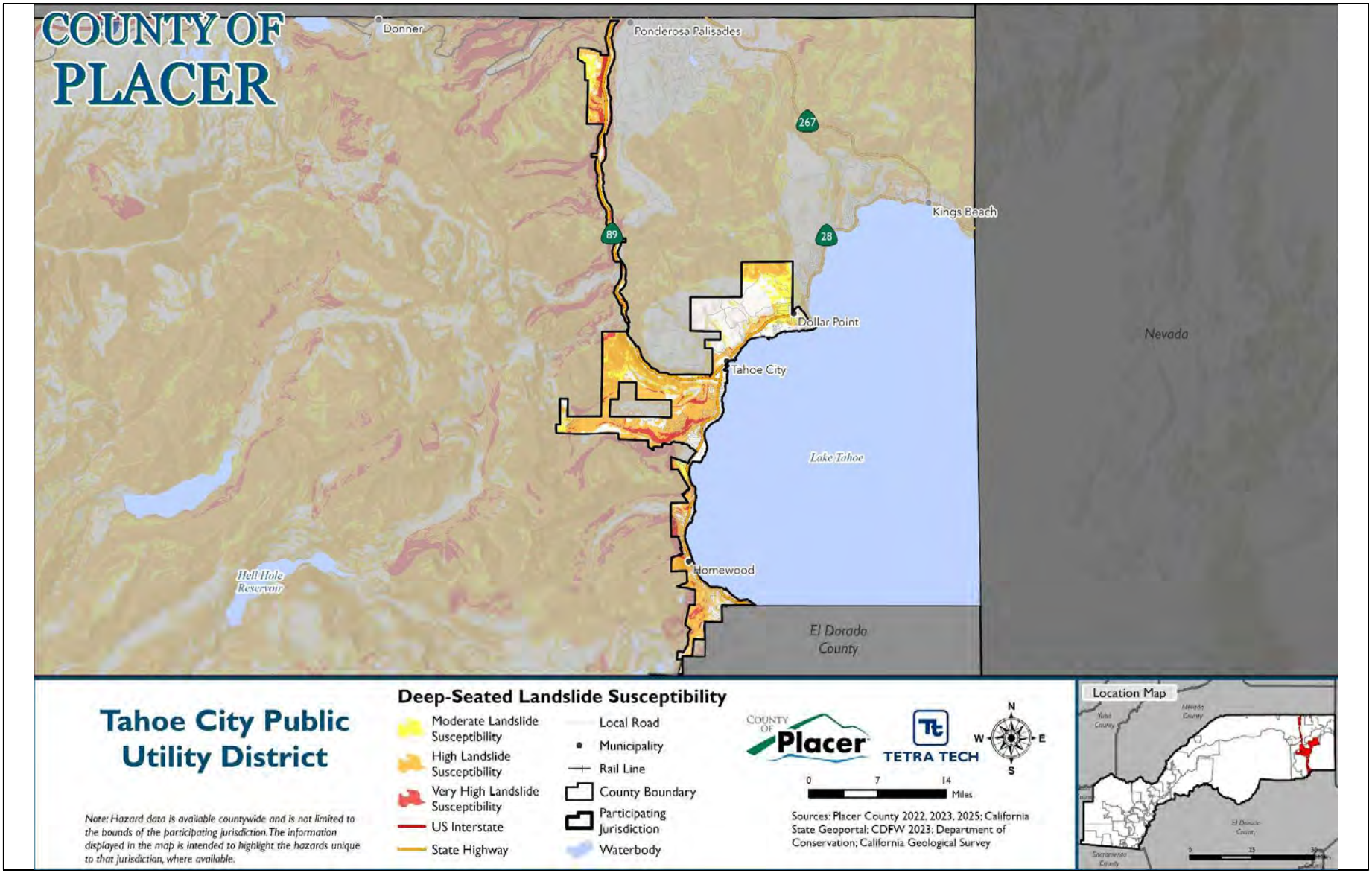


Figure 36-6. NEHRP Soil Class D Hazard Area

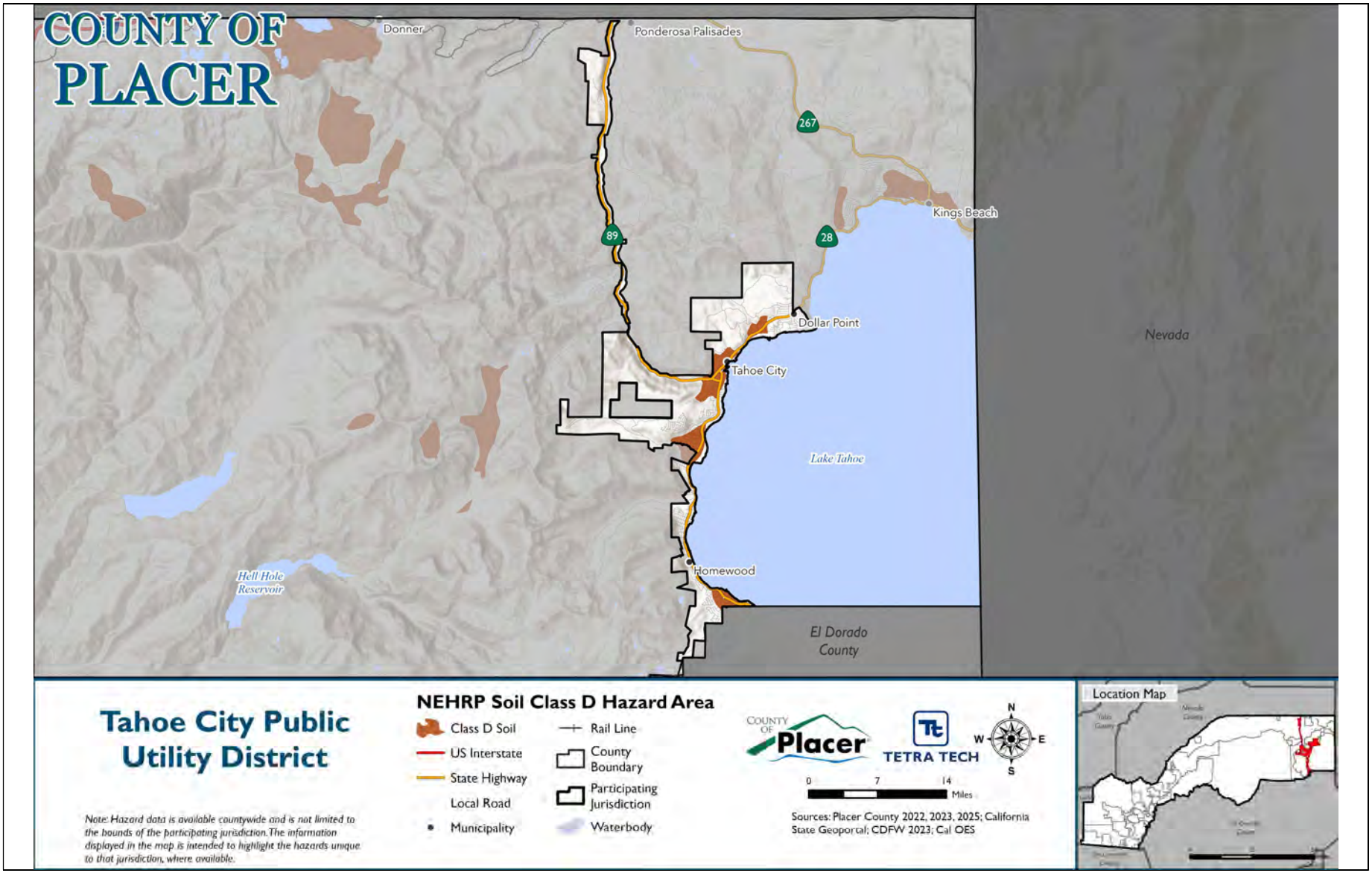
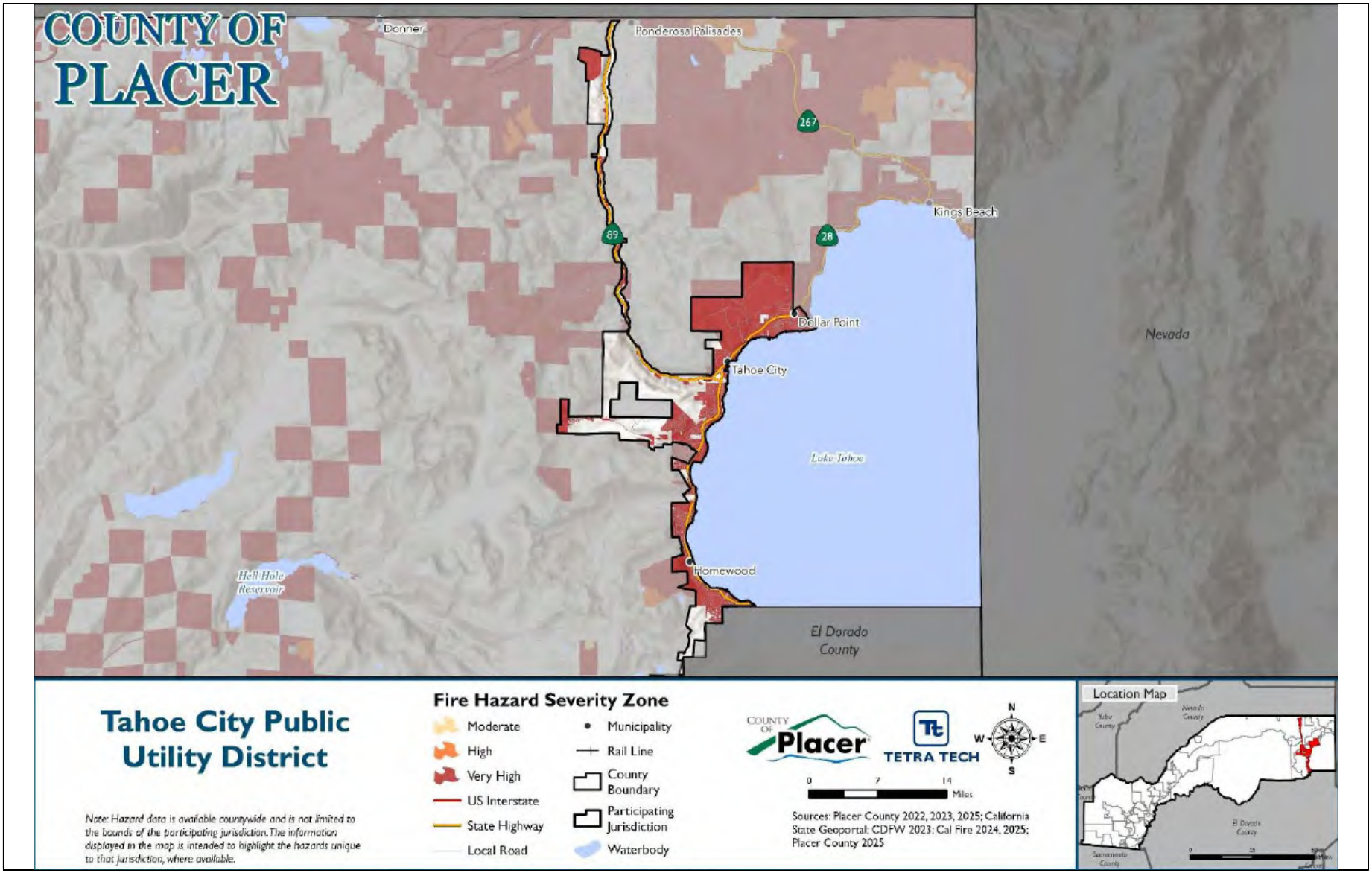


Figure 36-7. Wildfire Hazard Area



36.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 36-9 provides details on loss and damage in Tahoe City PUD during hazard events since the last hazard mitigation plan update.

Table 36-9. Hazard Event History in Tahoe City PUD, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	• Road closures • Power outages • Stand-by generator run costs • Equipment replacement costs • Overtime
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	• Road closures • Drainage flooding • Power outages • Stand-by generator run costs • Equipment replacement costs • Overtime

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	• Road closures • Drainage flooding • Power outages • Stand-by generator run costs • Equipment replacement costs • Overtime
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	• Road closures • Drainage flooding • Power outages • Stand-by generator run costs • Equipment replacement costs • Overtime
March 4, 2023	March 7, 2023	Winter Weather	A powerful, cold storm system with heavy snow and gusty winds sometimes brought dangerous driving with whiteout conditions. Snow amounts of 3 to 5 feet were reported in the mountains. Heavy snow fell down into the foothills impacting travel. Numerous schools were closed or had delays due to the snow. Gusty winds of 40-50 mph were recorded across the area, with gusts locally higher in the high elevations of the northern Sierra. The winds and low snow combined to cause dangerous travel conditions with an extended closure of Interstate 80. Accumulating snow fell into the Motherlode foothills. CoCoRaHS snowfall reports included 3.0 inches at Grass Valley 2.7 SW, and 2.5 inches at Sonora 3.4E, 3.5 inches at Volcano 3.2N and 5.8 inches of snow at Camino 1.2 N. Schools and businesses were reported closed. Numerous power outages were reported, including continued outages from previous storms. Several storage units collapsed in Grass Valley due to heavy snow load. No injuries reported.	• Road closures • Drainage flooding • Power outages • Stand-by generator run costs • Equipment replacement costs • Overtime

36.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Tahoe City PUD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- The hazard ranking for avalanche, flood, freeze and snow, and heavy rains and storms increased from low to medium.
- Drought and Water shortage- low risk, adequate supply
- Earthquake – low risk in Tahoe City, low concern from public
- High Winds and Tornadoes- not common in area

Table 36-10 shows Tahoe City PUD's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 36-10. Hazard Ranking

Hazard	Rank
Avalanche	Medium
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Low
Flood	Medium
Freeze and Snow	Medium
Heavy Rains and Storms	Medium
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

36.7.4 Vulnerability Assessment

Table 36-11 lists issues related to the top hazards of concern for Tahoe City PUD. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 36-11. Hazard Issues

Issue	Related Hazard
Existing water system is not sufficient to provide domestic drinking water for Tahoe Cedars and fire suppression in the event of a wildfire.	Drought and Water Shortage, Earthquake, Wildfires
Existing water system is not sufficient to provide domestic drinking water for Madden Creek and fire suppression in the event of a wildfire.	Drought and Water Shortage, Earthquake, Wildfires
Water storage levels are not currently sufficient for fire suppression and drought preparedness.	Drought and Water Shortage, Earthquake, Wildfires
The District does not currently have recreational space for programing or a local space for community outreach and emergency shelter.	Earthquake, Flood, Freeze and Snow, Wildfire, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow

36.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 36-12 describes the potential impacts of the hazards of local concern to Tahoe City PUD (hazards identified as medium or high risk in Table 36-10). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

36.7.6 Changing Conditions That May Impact Risk

No significant population, development, or other changes have been identified that would affect Tahoe City PUD's overall vulnerability since the previous plan was approved.

Table 36-12. Hazard Impacts

Hazard	Potential Impacts
Avalanche	Avalanches can damage or bury water mains and service lines, increasing repair and replacement costs for critical infrastructure. They may also restrict access to construction sites and facilities, causing delays and additional labor costs.
Flood	Flooding can lead to road closures and drainage system overload, causing access issues and increased response times. Prolonged water intrusion may result in equipment damage and replacement costs, while emergency operations often require overtime labor and extended use of stand-by generators, increasing operational expenses
Freeze and Snow	Severe freeze and snow conditions can lead to pipe breaks and equipment failures, requiring costly repairs and replacements. Snow accumulation may block roads, increasing overtime for crews and delaying access to storage tanks and interconnected systems.
Heavy Rains and Storms	Intense storms can cause drainage flooding and road closures, disrupting construction and maintenance activities. Flooding may damage water mains and hydrants, leading to equipment replacement costs and extended stand-by generator use during power outages.
Landslides, Mudslides, and Debris Flow	Landslides pose a risk of pipeline displacement or destruction, especially in areas with interconnected systems and storage tanks. This can result in major reconstruction costs, service interruptions, and increased overtime for emergency response.
Wildfire	Wildfires threaten above-ground infrastructure such as hydrants and storage tanks, potentially causing loss of assets and high replacement costs. They also increase demand for fire protection systems, stressing water supply networks and requiring extended generator use if power is lost.

36.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

36.8.1 Changes in Community Priorities

Community priorities center on improving water system reliability, expanding storage capacity, and ensuring safe, efficient distribution to meet growing demand. These efforts also emphasize interconnection between systems to enhance resilience and provide access to high-quality treated water. In addition, investment in shared spaces reflects a commitment to fostering community engagement and well-being through recreational and social opportunities.

36.8.2 Past Mitigation Action Status

Table 36-13 indicates progress on the District's mitigation strategy identified in the 2021 LHMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Table 36-13. Status of Previous Mitigation Actions

Action Number	Project Description	Project name	Status	Include in new strategy?	IF NO, explain why no longer relevant
1	This project proposes to construct two new storage tanks to interconnect with two existing storage tanks to create a network of storage facilities at the same elevations which will interconnect 6 of those 10 systems. In addition, once interconnected, all systems will have access to approximately 1 million gallons per day of treated surface water from Lake Tahoe from the West Lake Tahoe Regional Water Treatment Plant which begins construction in 2021.	West Shore Storage Augmentation Project	Not Complete	Yes	N/A
2	This project proposes to rebuild approximately 80,000 lineal feet of water main, install approximately 100 fire hydrants and approximately 1,180 water services and meters. Approximately 15,000 feet of pipeline is located in Placer County.	Tahoe Cedars Water System Interconnection and Distribution Project	Not Complete	Yes	N/A
3	This project proposes to rebuild approximately 24,000 lineal feet of water main, 40 fire hydrants and approximately 150 water services and meters.	Madden Creek Water System Interconnection and Distribution Project	Not Complete	Yes	N/A
4	This project proposes to construct a new water treatment plant capable of providing up to 1 million gallons a day of drinking water to the Placer County communities of Tahoma north to the Timberland Subdivision. The plant will be designed to be expandable to 1.5 million gallons per day in the future.	West Lake Tahoe Regional Water Treatment Plant	Complete	Yes	N/A

36.8.3 Additional Mitigation Efforts

In addition to the mitigation actions completed from the previous LHMP, Tahoe City PUD has completed or made significant progress on the following other mitigation efforts since the last LHMP:

- Completed reconstruction of the Timberland Water system
- Completed construction of Rubicon 1 tank water feed line
- Completed construction of the lower Meeks Bay PRV Project
- By-pass port installations on sewer force mains
- Acquired Tahoe Swiss Village and Glenridge water systems

36.8.4 Hazards Omitted from Mitigation Strategy

While the avalanche hazard area occurs within the District's boundaries, none of the District's facilities or infrastructure are located in the hazard area. In addition, the dam and levee hazard areas do not occur within the District's boundaries. Therefore, both hazards were omitted from the mitigation strategy.

36.8.5 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Tahoe City PUD would like to pursue in the future to reduce the risk from hazards.

Table 36-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 36-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	-	-	-	-
Dam and Levee Failure	-	-	-	-
Drought and Water Shortage	-	X	-	-
Earthquake	-	X	-	-
Flood	-	X	-	-
Freeze and Snow	-	X	-	-
Heavy Rains and Storms	-	X	-	-
High Winds and Tornadoes	-	X	-	-
Landslides, Mudslides, and Debris Flows	-	X	-	-
Wildfire	-	X	-	-

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 36-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 36-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
TCPUD-01	Tahoe Cedars Water System Interconnection and Distribution Project	4	1-5 Years	High	High	7	Medium
TCPUD-02	Madden Creek Water System Interconnection and Distribution Project	4	1-5 Years	High	High	7	Medium
TCPUD-03	West Shore Storage Augmentation Project	4	1-10 Years	High	High	6	Medium
TCPUD-04	Tahoe City Community Center Project	4	1-10 Years	Medium	High	5	Low

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

36.8.6 Mitigation Strategy

Table 36-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. The Tahoe City PUD Utilities Department will lead implementation of all projects listed in Table 36-16. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 36-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Support Agency	Sources of Funding
TCPUD-01	Tahoe Cedars Water System Interconnection and Distribution Project	This project proposes to rebuild approximately 80,000 lineal feet of water main, install approximately 100 fire hydrants and approximately 1,180 water services and meters. Approximately 15,000 feet of pipeline is located in Placer County. This project will reduce utility systems' vulnerability to avalanches, drought and water shortages, earthquakes, freezing weather, wildfires, floods, heavy rains, storms, and landslides, mudslides, and debris flow.	Avalanche, Drought and Water Shortage, Earthquake, Wildfires, Flood, Freeze and Snow, Heavy Rain & Storms, Landslide Mudslide and Debris Flow	Placer County, El Dorado County	El Dorado Water Agency, Department of Water Resources, Integrated Regional Water Management Plan, Lake Tahoe Restoration Act
TCPUD-02	Madden Creek Water System Interconnection and Distribution Project	This project proposes to rebuild approximately 24,000 lineal feet of water main, 40 fire hydrants and approximately 150 water services and meters. This project will reduce utility systems' vulnerability to avalanches, drought and water shortages, earthquakes, freezing weather, wildfires, floods, heavy rains and storms, and landslides, mudslides, and debris flow.	Avalanche, Drought and Water Shortage, Earthquake, Wildfires, Flood, Freeze and Snow, Heavy Rain & Storms, Landslide Mudslide and Debris Flow	Placer County	Placer County Water Agency, Department of Water Resources, Integrated Regional Water Management Plan, Congressionally Directed Spending
TCPUD-03	West Shore Storage Augmentation Project	This project proposes to construct two new storage tanks to interconnect with two existing storage tanks to create a network of storage facilities at the same elevations which will interconnect 6 of those 10 systems. In addition, once interconnected, all systems will have access to approximately 1 million gallons per day of treated surface water from Lake Tahoe from the West Lake Tahoe Regional Water Treatment Plant which begins construction in 2021.	Drought and Water Shortage, Earthquake, Wildfires	Placer County, El Dorado County	Placer County Water Agency, El Dorado Water Agency, Department of Water Resources, Lake Tahoe Restoration Act
TCPUD-04	Tahoe City Community Center Project	This project is to construct a new West Shore community center that will serve as an emergency shelter during hazard events. The facility will be equipped with backup power and constructed to minimize its vulnerability to natural hazards.	Earthquake, Flood, Freeze and Snow, Wildfire	Placer County	Tahoe City PUD, Bond measure

37. Truckee Donner Public Utility District Annex

This jurisdictional annex to the Placer County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides information to assist public and private sectors in Truckee Donner Public Utility District (TDPUD) with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Truckee Donner Public Utility District, describes who participated in the planning process, assesses Truckee Donner Public Utility District's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

The MJHMP was developed to meet plan participation requirements for all participating jurisdictions while accommodating their specific needs and limitations. Because some participating jurisdictions are small agencies with limited staff, the planning process included establishing a Hazard Mitigation Planning Committee and engaging a contract consultant to undertake certain elements of the plan update on behalf of all jurisdictions. These elements included outreach to stakeholders and the public, risk assessment for all Countywide hazards of concern, initial ranking of hazard risks, updates of hazard mitigation goals and objectives, and establishment of procedures for implementing and maintaining the MJHMP. This annex presents only the information specific to TDPUD as a participating jurisdiction. All other plan elements are included in Volume 1 and are referenced in this annex as appropriate.

37.1 Hazard Mitigation Planning Team

Truckee Donner Public Utility District identified MJHMP points of contact and developed this annex over the course of several months. The following District staff members had primary responsibility for preparation of the annex:

Primary Point of Contact: Scott Botn, Risk Manager

Address: 11570 Donner Pass Road, Truckee, CA 96161

Phone Number: 530-582-3987

Email: scottbotn@tdpud.org

Alternate Point of Contact: Steven Poncelet, PIO and Strategic Affairs Director

Address: 11570 Donner Pass Road, Truckee, CA 96161

Phone Number: 530-587-3896

Email: stevenponcelet@tdpud.org

The Risk Management Department represented the community on the Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. District personnel were asked to contribute to the annex development by conducting public and

stakeholder outreach, reviewing and contributing to the capability and risk assessments, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 37-1 lists all staff who contributed to the plan. Additional documentation of plan participation is included in Volume 1.

Table 37-1. Hazard Mitigation Planning Team Activities

Name	Department	Position	MJHMP Contribution
Scott Botn	Risk Management	Risk Manager	Led the coordination of planning efforts, provided hazard data, ICS experience, mitigation project input.
Steven Poncelet	Administration	PIO	Assisted with community outreach strategy, messaging, and reviewing draft annex content.
Mike Swanson	Electric Utility	Electric Utilities Director	Provided hazard impact history and mitigation action status related to electric infrastructure.
Chad Reed	Water Utility	Water Utility Director	Provided subject-matter expertise on water system vulnerabilities and response planning.

37.2 Community Profile

TDPUD is one of the 6,000 special districts in California. TDPUD offers electric and water services to the greater Truckee area including portions of Nevada and Placer Counties. The District serves more than 15,000 customers, most of which are residential (NCPA n.d.). It occupies 45.5 square miles beginning 4 miles from the northern border just beyond Alder Creek Road south to the Placer County line, and 11 miles from the western shore of Donner Lake eastward to the rim of Boca Dam and includes the community of Hirschdale. The TDPUD has approximately 212 miles of water mains, 135 miles of overhead electric lines, and 100 miles of underground electric lines.

37.3 Public Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders and the public that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the Truckee Donner Public Utility District completed its own activities to collect input on hazards and vulnerability from the people and stakeholders the District serves. Below is a summary of outreach activities undertaken by the jurisdiction and additional efforts are shown in Appendix C.

37.3.1 Outreach Activities

Engagement efforts included sharing information through trusted community partners, offering virtual and in-person meeting options, and providing materials in accessible formats. This approach helped ensure that the needs and perspectives of socially vulnerable populations were incorporated into the planning process. The public was invited to participate in the planning process by responding to the public survey, attending a virtual Hazard Mitigation Planning Committee meeting, attending an in-person meeting, and reviewing the draft plan.

37.3.2 Public Feedback Integration

No public feedback was received.

37.4 Stakeholder Engagement

Volume 1 of this MJHMP describes the outreach to stakeholders that was undertaken on behalf of all participating jurisdictions to prepare this MJHMP update. In addition to that work, the District invited stakeholders to participate in the planning process. The following organizations were invited to participate by attending a Hazard Mitigation Planning Committee meeting, responding to the stakeholder survey, contributing information and expertise to the plan, and reviewing the draft plan.

37.4.1 Local and Regional Agencies Involved in Hazard Mitigation Activities

These agencies provide essential data and coordination during wildfire, flood, and winter storm events. They will be invited to review draft plan materials and attend planning meetings to align mitigation actions and identify shared risk areas.

- Town of Truckee Office of Emergency Services
- Cal Fire
- Truckee Fire Protection District

37.4.2 Agencies that Have the Authority to Regulate Development

These stakeholders regulate land use and future development. They will help ensure that mitigation actions are consistent with growth and zoning regulations and support integrating MJHMP goals into general plans.

- Placer County Community Development Resource Agency
- Town of Truckee

37.4.3 Neighboring Communities

Neighboring districts share infrastructure corridors and wildfire threats. Coordination with these entities will ensure consistent regional hazard mitigation and response strategies.

- Tahoe-Truckee Sanitation Agency
- Truckee Sanitary District

37.4.4 Representatives of Business, Academia, and Other Private Organizations

These stakeholders are critical to maintaining economic stability, utility service continuity, and education access during hazard events. They will be invited to planning meetings and encouraged to contribute feedback on hazard impacts and priorities.

- Truckee Chamber of Commerce
- Tahoe Truckee Unified School District
- Liberty Utilities

37.4.5 Nonprofit Organizations and Community-Based Organizations

These organizations work directly with vulnerable groups and will support outreach, emergency shelter planning, and the development of equitable mitigation strategies.

- Sierra Community House
- American Red Cross Northen Nevada

37.5 Jurisdictional Capability Assessment

Truckee Donner Public Utility District performed an inventory and analysis of existing authorities, policies, programs and resources that enhance its ability to implement mitigation strategies. Volume 1 describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Regulatory capabilities
- Planning capabilities
- Development and permitting capabilities
- Administrative capabilities
- Technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Placer to identify opportunities for integrating mitigation concepts into ongoing District procedures.

As a special district, Truckee Donner Public Utility District lacks some of the regulatory capabilities that are available to municipalities. Specifically, the District has no authority over building codes, land use, development, or permitting. Construction and development in the District are subject to the building codes, land use regulations, and development standards of the municipality or County where they occur. The District also is not eligible for participation in the National Flood Insurance Program (NFIP). Therefore, assessments of capabilities associated with buildings, development and floodplain management and insurance are omitted from this annex.

The full list of capabilities assessed is available in Appendix B. Capabilities that the jurisdiction has available are described in the following sections.

37.5.1 Regulatory Capability

Regulatory capabilities are the codes, regulations, and ordinances that prevent and reduce the impacts of hazards. The MJHMP Team inventoried existing ordinances against the full capability list of hazard mitigation-related capabilities. Table 37-2 summarizes the ordinances currently in place in the District. The absence of other kinds of ordinances was not considered a gap in local capabilities.

Table 37-2. Codes, Ordinances, and Regulations

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Building Code Title 24, Part 2 January 1, 2026	The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.	The District does not have the authority to expand or improve state codes.	Placer County Building Department
California Water Code January 1, 2023	The California Water Code establishes regulations applied to water resources and water service providers in California. Hazard mitigation is addressed in Division 3 (Dams and Reservoirs), Division 5 (Flood Control), Division 6 (Conservation, Development, and Utilization of State Water Resources), and Division 28 (Wildfire Prevention and Recovery Act of 2019).	The District does not have the authority to expand or improve state codes.	California Department of Water Resources
California Public Utilities Code Division 7 January 1, 2023	The California Public Utility District Act is the primary state law enabling the formation, governance, and operation of local public utility districts (PUDs) for providing services like electricity, water, gas, and sewage, especially in unincorporated areas, allowing local control over essential services outside direct CPUC regulation but within the state's framework	The District does not have the authority to expand or improve state codes.	California Public Utilities Commission

Code, Ordinance, Regulation Code Chapter/Name Date Last Updated	Description	Expand and Improve	Department Responsible
California Plumbing Code January 1, 2022	The California Plumbing Code (CPC) sets statewide minimum standards for plumbing systems, based on the Uniform Plumbing Code (UPC) but with unique California amendments and additions, covering everything from materials to fixture requirements for health and safety. The Code is integrated in District Ordinances and Technical Specifications.	The District does not have the authority to expand or improve state codes.	Placer County Building Department

37.5.2 Planning Capability

The MJHMP Team inventoried existing plans against the full capability list of hazard mitigation-related capabilities. Table 37-3 summarizes the plans currently in place. The absence of other kinds of plans was not considered a gap in local capabilities.

Table 37-3. Plans

Name of Plan	Integration	Expand and Improve	Department Responsible
Capital Improvement Plan November 2023	The capital improvement plan does not have any stated goals related to hazard mitigation. Hazard mitigation is considered by staff when developing projects for the CIP.	The District has the ability to expand and improve the plan.	Truckee Donner PUD Finance
Urban Water Management Plan 2020	The Plan projects total water use be compared to water supply sources over the next 20 years in 5-year increments.	The District has the ability to expand and improve the plan.	Truckee Donner PUD Water Operations
Water Shortage Contingency Plan June 2, 2021	The Plan identifies water shortage stages, response actions, communication protocols, and reporting requirements.	The District has the ability to expand and improve the plan.	Truckee Donner PUD Water Operations

As a first-time participant in the MJHMP, the District plans are not currently integrated with the MJHMP. As these local plans are updated, information from the approved MJHMP, such as risk assessments, vulnerability data, and prioritized projects can be incorporated to maintain consistency and reinforce long-term resilience goals. The departments noted as responsible in the table above will be responsible for integrating data, information, goals, and actions from the MJHMP into these planning mechanisms, by formal adoption where feasible.

37.5.3 Development and Permitting Capability

Truckee Donner Public Utility District is a special district located in Placer County. The District is subject to the Placer County and State of California building codes and land use regulations. The District does not permit or regulate development. Development permits within the District's jurisdiction are issued through Placer County.

37.5.4 Administrative Capability

Table 37-4 summarizes the administrative bodies and programs available to support hazard mitigation efforts in the District.

Table 37-4. Administrative Capabilities

Capability	Description, Expansion, Improvement
TDPUD Board of Directors	The Board can endorse hazard mitigation projects.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	The Electric and Water Utilities perform maintenance on electric and water infrastructure to reduce the risk of outages and maintain system performance. This includes vegetation management programs on TDPUD's overhead power lines and defensible space and forest management on TDPUD owned properties.
Mutual aid agreements	California Utilities Emergency Association (CUEA) and California Water/Wastewater Agency Response Network (CALWARN)
Human Resources Manual ***e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?***	Human Resource and Risk Management Director. People are the District's most important resource.

37.5.5 Technical Capability

Table 37-5 summarizes the technical and personnel resources available to support hazard mitigation efforts in the District.

Table 37-5. Technical Capabilities

Resources	Description, Expansion, Improvement
Planners or engineers with an understanding of natural hazards	Staff are trained in natural hazard mitigation, especially with regard to drought, flood, and heavy rain

37.5.6 Fiscal Capabilities

Table 37-6 summarizes financial resources available to Truckee Donner PUD.

Table 37-6. Fiscal Capabilities

Financial Resources	Description, Expansion, Improvement
Capital improvements project funding	Expansion of capital improvement funding is limited by budgetary constraints
User fees for water, sewer, gas, or electric service	The District collects user fees for services provided.
Impact fees for homebuyers or developers of new development/homes	The District has this capability and may expand it upon approval by voters.
Incur debt through general obligation bonds	The District has this capability and may expand it upon approval by voters.
Incur debt through private activity bonds	The District has this capability and may expand it upon approval by voters.

37.5.7 Education and Outreach Capability

Table 37-7 summarizes the education and outreach resources available to Truckee Donner PUD.

Table 37-7. Education and Outreach Capabilities

Outreach Resources	Description, Expansion, Improvement
Public information officer or communications office	TDPUD staff are trained in public communications.
Personnel skilled or trained in website development	TDPUD has access to website developers through a contract.
Hazard mitigation information available on your website	TDPUD provides information related to hazard mitigation on www.tdpud.org and may expand the information.
Social media for hazard mitigation education and outreach	TDPUD primarily uses X (Twitter) and Facebook.
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	The TDPUD has developed communications channels (phone, e-mail, text, website, outage management systems, and digital to communicate with customers and the community. While not targeted at natural hazards, the severe mountainous weather in which the District operates in the high Sierra Nevada Mountains and the impacts on system reliability are a major communications area.

37.5.8 Community Classifications

Table 37-8 summarizes classifications for community programs available to Truckee Donner PUD.

Table 37-8. Community Classifications

Program	Participating?	Classification	Date Classified
CAL FIRE Risk Reduction Community List	Yes	Truckee Fire Protection District	-

37.5.9 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 37-9 summarizes the adaptive capacity for each identified hazard of concern and the District’s capability to address related actions using the following classifications:

- Strong adaptive capacity means the jurisdiction has the capability to effectively respond, plans or policies that exceed minimum requirements, and deployable resources that decrease vulnerability.
- Moderate adaptive capacity means minimum requirements are in place, capabilities are moderate, mitigation measures are identified but not implemented widely, and the jurisdiction can recover but needs outside resources.
- Weak adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak, outdated, or

inconsistent plans, policies, codes, or ordinances, no redundancies, limited to no deployable resources, and limited capabilities to respond.

Table 37-9. Adaptive Capacity

Hazard	Adaptive Capacity
Avalanche	Moderate
Dam and Levee Failure	Moderate
Drought and Water Shortage	Moderate
Earthquake	Moderate
Flood	Moderate
Landslides, Mudslides, and Debris Flow	Moderate
Freeze and Snow	Moderate
Heavy Rains and Storms	Moderate
High Winds and Tornadoes	Moderate
Wildfire	Moderate

37.6 National Flood Insurance Program

Truckee Donner Public Utility is a special district for Placer County. The District does not participate in the NFIP directly. Therefore, all structures located within the District's jurisdiction were included in the Placer County assessment of NFIP-insured structures with repetitive loss. This information can be found in the annex for Placer County.

37.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1 provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Truckee Donner Public Utility's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

37.7.1 Hazard Area

The probable hazard areas within the District are shown in Figure 37-1 and Figure 37-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Truckee Donner PUD has significant exposure; maps with no identified hazard areas in the jurisdiction's boundaries are not included. The Truckee Donner PUD is located in both Nevada and Placer Counties; the below maps show the Placer County portion only.

Figure 37-1. Landslide Hazard Area

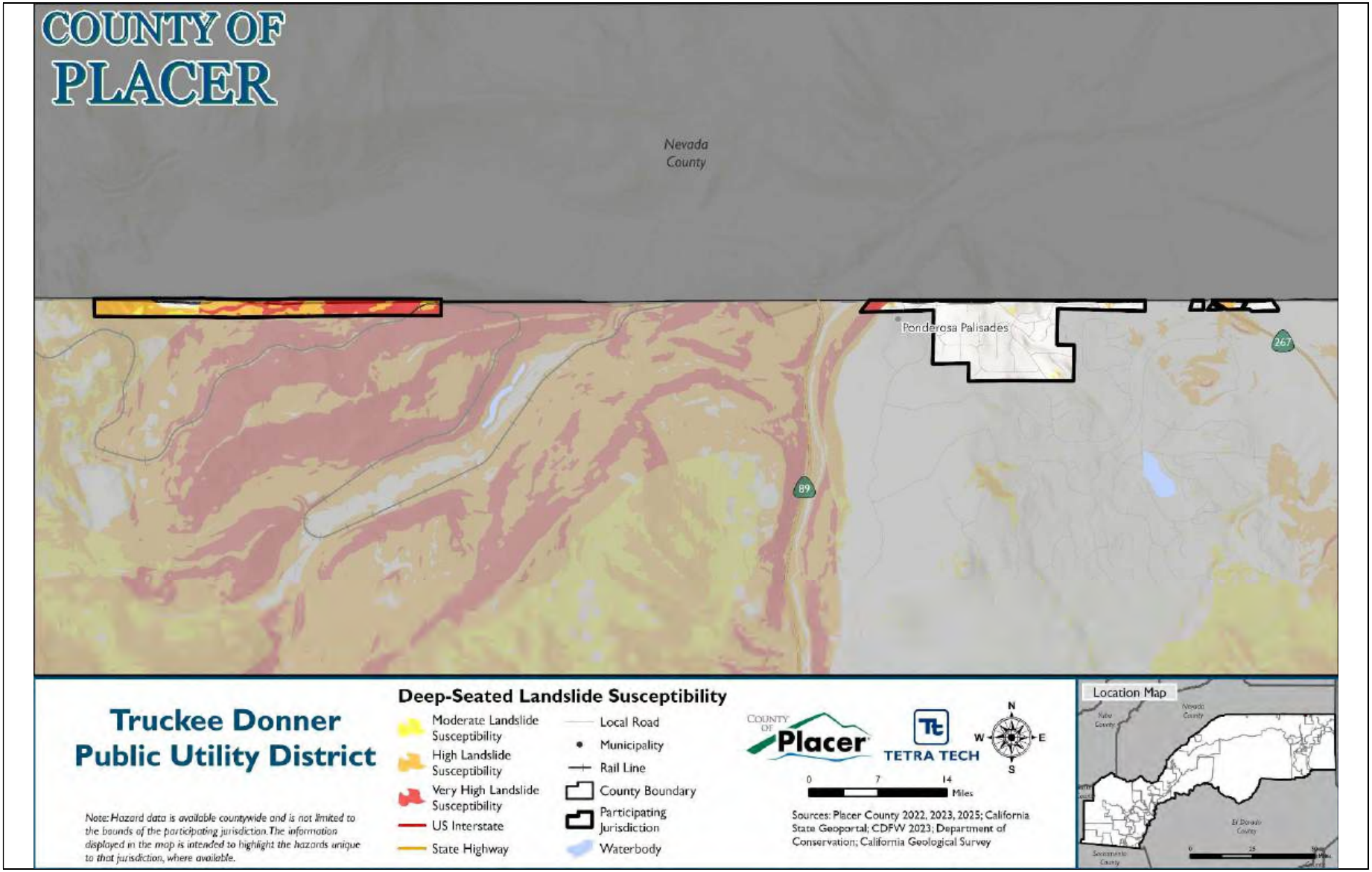
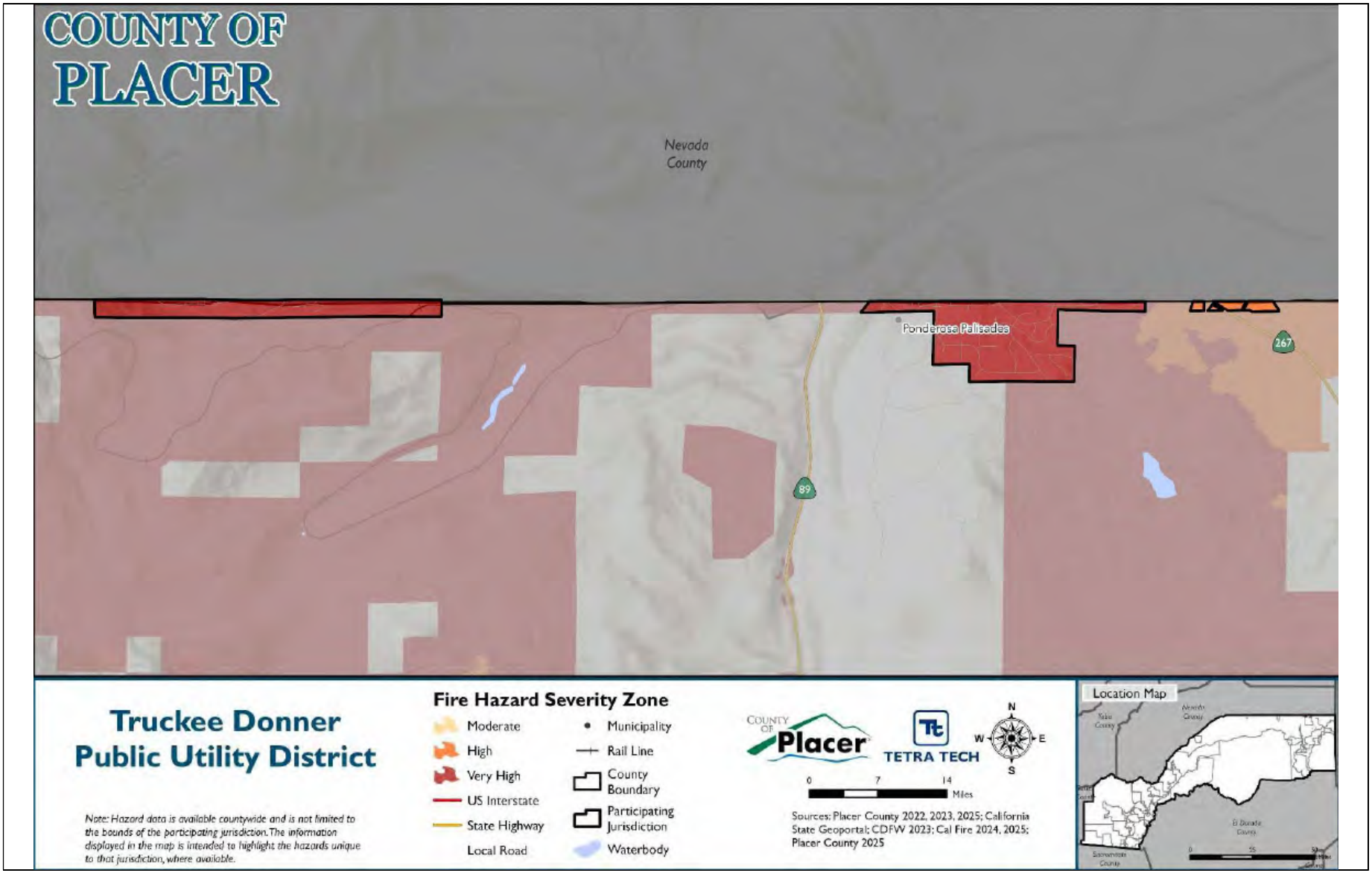


Figure 37-2. Wildfire Hazard Area



37.7.2 Hazard Event History

Each hazard profile in Volume 1 includes a chronology of historical hazard events that have affected the overall planning area. Table 37-10 provides details on loss and damage in Truckee Donner Public Utility District during hazard events since the last hazard mitigation plan update.

Table 37-10. Hazard Event History in Truckee Donner Public Utility District, 2020 to 2024

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 13, 2021	December 13, 2021	High Wind, Winter Storm	A weather system brought winter weather to the Sierra Nevada and southern Cascades. Reports of 52 to 66 inches of new snow were received. Low elevation snow also occurred with snow accumulation reported down to approximately 2,500 feet in elevation in the western foothills of the Sierra Nevada. Chain controls were in place on Interstate 80 and Highway 50 during the event. Traffic was also briefly closed to through traffic on I-80 for 34 minutes on the 13th due to downed powerlines. A rock slide also closed state route 70 at 3:30 am on the 13th. Highway 49 was closed during the event due to a down tree. Power outages were also reported across the region. Several counties also opened warming centers for the cold temperatures. High winds caused a significant amount of trees and powerlines to fall across the area causing widespread power outages leading to tens of thousands of people left without power, roadways were closed and blocked, and dangerous driving conditions were observed including a vehicle struck by a powerline.	Very wet and windy winter storms following a period of drought that led to significant tree damage. Formal emergency declared, mutual aid from Roseville Electric, and almost $2M in damage. TDPUD applied for and received disaster relief of ~$1.3M from Cal OES.
December 21, 2021	December 28, 2021	Strong Wind	Several high impact winter storms impacted the region around the Christmas holiday. Widespread precipitation, low snow levels of 500 to 2500 feet, and strong and damaging winds resulted. Impacts ranged from fallen trees, downed power and phone lines, with widespread and extended outages, treacherous driving conditions including chain controls and extended highway closures due to wind and/or snow, multiple accidents and spin outs due to snow, damaged property due to snow and wind. Governor Gavin Newsom declared a state of emergency in 20 California counties due to the impacts from the series of storms. The affected areas include: El Dorado, Nevada, Placer, Sacramento and Yuba counties, but also Los Angeles and parts of the Bay Area. As of 12/29 1300 hours, Cal-OES estimated that the late December storm damages to roadway infrastructure total $22.2 million. Warming centers were also opened across the region for those impacted by the stormy weather	Very wet and windy winter storms following a period of drought that led to significant tree damage. Formal emergency declared, mutual aid from Roseville Electric, and almost $2M in damage. TDPUD applied for and received disaster relief of ~$1.3M from Cal OES.

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
December 10, 2022	December 10, 2022	Strong Wind	Another weekend storm delivered widespread rain, mountain snow and gusty winds to interior NorCal. Localized flooding, downed trees, and mountain travel impacts were observed starting on 12/9/22 through early 12/12/22. Sacramento International Airport reported a max gust of 52 mph. California Highway Patrol reported multiple downed trees and power lines across the Sacramento Area, resulting in 32,431 customers across the Sacramento region without power according to broadcast media.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond.
December 31, 2022	December 31, 2022	Flood, High Wind	A strong and very wet atmospheric storm brought extended periods of moderate to heavy rain and periods of strong winds to much of the region, along with heavy high-elevation snow. Precipitation totals were around 1-3 inches for the Central Valley, 3-6 inches in the foothills, and 5-8 inches of liquid equivalent in the mountains. Heavy snow disrupted mountain travel, with multiple spinouts causing I-80 to be shut down for 18 hours. Highway 50 was closed in El Dorado County due to a combination of flooding and snow. High winds gusting 50-65 mph in the Central Valley caused large numbers of trees to fall, bringing widespread power failures across the area, with hundreds of thousands of customers impacted. Many local roads were closed to downed trees blocking them. Trees were also reported to have fallen on homes and automobiles. CHP reported a mudslide through a house and a tree down on SR49 and SR 193 in Placerville. The Placerville Airport reported gusts up to 47 mph. A large tree was reported down at McCourtney Rd. in Lincoln at 11:22 PST. Lincoln Airport measured a gust of 44 mph at 5:35 PST.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond
January 4, 2023	January 4, 2023	High Wind	A powerful atmospheric river brought very strong winds with moderate to heavy rain and renewed flooding of the already elevated waterways. There were dangerous mountain travel conditions at Sierra pass levels with 6 to 18 inches of snow above 6500 feet. Winds gusted up to 50-60 mph in the Valley, with gusts up to 70 to 100 mph in the mountains. There were widespread trees down, blocking roads and causing numerous power outages across the area. Rainfall amounts were 1 to 3 inches in the Central Valley and 2 to 6 inches in the foothills and mountains. There were 2 fatalities reported, one due to drowning, and the other due to a rain-related car accident. A very large tree was reported in the roadway at McComber St, Florin, approximately 40 feet tall. Around 15,000 SMUD customers without power and thousands without power in the PG&E area. McClellan Airfield reported gusts of 45 to 51 mph through the evening. Placerville Airport reported winds from the south at 29 mph with a gust of 39 mph at 6:15 pm PST.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
January 7, 2023	January 7, 2023	Strong Wind	A major winter storm brought strong winds with moderate to heavy rain bringing renewed flooding of already elevated waterways. There was flooding of roadways, urban areas, rivers, streams and creeks, with rockslides and mudslides also reported. There were dangerous mountain travel conditions with snow levels around 4000 feet and 3 to 5 feet of storm total snowfall above 6000 feet. Winds gusted up to 60-70 mph in the Central Valley. In the mountains there were gusts up to 80 to 115 mph, which coupled with heavy snow, brought whiteout conditions. There were widespread trees down across the area, blocking roads and causing numerous power outages. A trained spotter in Grass Valley measured a 71 mph gust with an anemometer. A transformer was reported by the California Highway Patrol to be sparking and causing a small fire in a tree. The California Highway Patrol reported a tree down in the road, in eastbound lanes and partially westbound lanes of Virginiatown Rd near Lost River Rd.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond
February 26, 2023	February 28, 2023	Heavy Snow	A major winter storm brought heavy mountain and low elevation snow with blizzard conditions in the Sierra, where 5 to 7 feet of storm total snow was reported, with locally higher amounts. Significant power outages, school closures, and road closures were observed. 1 fatality occurred from a collapsed porch due to heavy snow loading. Lower elevations observed widespread rain, gusty winds, and isolated thunderstorms. CoCoRaHS reported heavy storm total snow amounts, with 29.4 inches near Nevada City, 15.6 inches near Volcano, 10.4 inches near Camino, 26.3 inches near Grass Valley, and5 inches in Placerville. An 80 year old woman was killed when the porch of a house collapsed in Foresthill under the weight of snow, with about 4 feet of snow reported on the ground by Foresthill spotter. Widespread power outages were reported with multiple schools closed. Broadcast media reported the roof collapse of a church in Foresthill due to snow load, with no injuries reported.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond
March 4, 2023	March 7, 2023	Winter Weather	A powerful, cold storm system with heavy snow and gusty winds sometimes brought dangerous driving with whiteout conditions. Snow amounts of 3 to 5 feet were reported in the mountains. Heavy snow fell down into the foothills impacting travel. Numerous schools were closed or had delays due to the snow. Gusty winds of 40-50 mph were recorded across the area, with gusts locally higher in the high elevations of the northern Sierra. The winds and low snow combined to cause dangerous travel conditions with an extended closure of Interstate 80. Accumulating snow fell into the Motherlode foothills. CoCoRaHS snowfall reports included 3.0 inches at Grass Valley 2.7 SW, and 2.5 inches at Sonora 3.4E, 3.5 inches at Volcano 3.2N and 5.8 inches of snow at Camino 1.2 N. Schools and businesses were reported closed. Numerous power outages were reported, including continued outages from previous storms. Several storage units collapsed in Grass Valley due to heavy snow load. No injuries reported.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond

Date Begin	Date End	Hazard	Event Narrative	Jurisdiction Impacts
March 7, 2023	March 9, 2023	Heavy Snow	A cold winter storm brought low snow levels, with accumulating snow extending into the northern Sacramento Valley and the foothills. Accumulated heavy snow from a series of storms caused the roof of a school in Nevada City to collapse. There was 3.6 inches of snow reported 2 NNW of Nevada City on the 8th, but this was in addition to previous snow and road from earlier storms.	Severe winter storms, flooding, landslides, and mudslides impacted residents and property across Nevada County. TDPUD experienced power outages and increased costs to respond

37.7.3 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume 1. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions.

Truckee Donner PUD reviewed the preliminary hazard ranking calculated as described in Volume 1 to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the District indicated the following concerns and vulnerabilities relevant to a local ranking of the identified hazards:

- The rankings for earthquake, freeze and snow, and heavy rains and storms increased from low to medium.

Table 37-11 shows Truckee Donner Public Utility District's final hazard rankings for the identified planning area hazards of concern. Hazards with a high or medium risk ranking are considered to be hazards of local concern for the District; hazards with a low ranking are not considered to be hazards of local concern for the District. The assessment of vulnerability and potential impacts in the section below focuses on the hazards of local concern. Mitigation actions also target those hazards, though some of the identified actions additionally provide potential risk-reduction benefits for lower-ranked hazards.

Table 37-11. Hazard Ranking

Hazard	Rank
Avalanche	Low
Dam and Levee Failure	Low
Drought and Water Shortage	Low
Earthquake	Medium
Flood	Low
Freeze and Snow	Medium
Heavy Rains and Storms	Medium
High Winds and Tornadoes	Low
Landslides, Mudslides, and Debris Flow	Medium
Wildfire	High

Note: Based on the hazard rankings established in Volume 1, modified as appropriate based on review by the jurisdiction

37.7.4 Vulnerability Assessment

Table 37-12 lists issues related to the top hazards of concern for Truckee Donner Public Utility. These issues were identified based on local knowledge, the hazard event history, hazard rankings, hazard location, current capabilities, and the assessments of hazard vulnerability and potential impacts described in detail in Volume 1. Addressing these issues is an important community priority for the District, and the mitigation strategy has been developed to incorporate, where feasible, actions that would help to resolve one or more of these issues.

Table 37-12. Hazard Issues

Issue	Related Hazards
TDPUD's water system has evolved over the decades and has both old and new infrastructure. In some areas, the current spacing of water system hydrants within the Truckee Donner Public Utility District does not meet the industry standards prescribed by the American Water Works Association (AWWA) for effective fire protection. This inadequate spacing can lead to insufficient water supply during fire emergencies, potentially compromising the ability to control and extinguish fires promptly. As a result, the safety of the community and the protection of property are at risk.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire
Without proper training, staff may lack the necessary knowledge and skills to effectively implement the 2025 Emergency Operations Plan (EOP), potentially compromising the safety and reliability of utility services during critical situations.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire

Issue	Related Hazards
Truckee Donner Public Utility District faces increasing risks of wildfires due to climate change and other environmental factors. These wildfires pose a significant threat to the safety of the community and the reliability of electric utility services. Without a proactive approach to mitigate these risks, such as wildfire safety power outages during extreme wildfire danger, TDPUD's infrastructure and the surrounding areas remain vulnerable to catastrophic damage during high-risk periods.	Earthquake, Wildfire, High Winds and Tornadoes
TDPUD faces significant wildfire risks in high-risk areas due to the proximity of vegetation near power lines and critical circuits. This vegetation can fall on electric equipment, potentially leading to severe damage to utility infrastructure, prolonged power outages, and safety hazards for the community. Enhanced vegetation management and strategic sectionalization would improve TDPUD's ability to prevent and respond to wildfires.	Earthquake, Wildfire, High Winds and Tornadoes, Landslides Mudslides and Debris Flow
TDPUD faces significant risks to its electric overhead system due to severe weather events, aging infrastructure, and increased wildfire threats. These vulnerabilities can lead to frequent power outages, infrastructure damage, and safety hazards for the community. Without enhanced hardening measures, the electric overhead system remains susceptible to these risks, potentially compromising the reliability and safety of utility services.	Earthquake, Wildfire, High Winds and Tornadoes, Landslides Mudslides and Debris Flow
The Town of Truckee is facing significant challenges in maintaining safe and reliable evacuation routes for its residents. Overgrown vegetation and an electric overhead system along some of these key routes pose serious risks, including increased fire hazards and potential impacts to evacuation routes. These issues threaten the safety and well-being of the community, especially during critical evacuation scenarios.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire
TDPU facilities are at risk of significant damage due to earthquakes, which can compromise the safety and reliability of utility services. Truckee's major fault, Polaris, was only discovered ~2010 so some TDPUD facilities were constructed prior to updated construction standards. Without proper identification of vulnerabilities and implementation of hardening measures, these facilities remain susceptible to seismic events, potentially leading to prolonged service disruptions, costly repairs, and safety hazards for the community.	Earthquake

37.7.5 Potential Hazard Impacts

Based on the above jurisdiction-specific information, Table 37-13 describes the potential impacts of the hazards of local concern to Truckee Donner PUD (hazards identified as medium or high risk in Table 37-11). Special districts focus on maintaining critical facilities to provide specific services to customers. Therefore, the hazard impact assessment focuses on District-owned assets.

37.7.6 Changing Conditions That May Impact Risk

Although Truckee Donner PUD did not participate in the previous planning cycle, changing conditions are consistent with those identified in Chapter 2 County of Placer.

Table 37-13. Hazard Impacts

Hazard	Potential Impacts
Freeze and Snow	Snow accumulation and freezing temperatures occur routinely within the service area and are managed through established operational procedures such as snow removal, facility winterization, and fleet readiness. These conditions do not require additional mitigation measures and are not included in the hazard mitigation strategy.
Heavy Rains and Storms	Intense precipitation can lead to localized flooding, erosion, and power outages. These impacts may disrupt utility operations and damage infrastructure. Mitigation efforts will focus on improving storm response procedures, hardening critical infrastructure, and strengthening communication systems during severe weather events.
Landslides, Mudslides, and Debris Flow	The mountainous terrain within the service area presents a moderate risk of slope instability, particularly following wildfire or heavy rainfall. Potential impacts include blocked access routes and damage to utility assets. Mitigation will involve coordination with local agencies, careful infrastructure siting, and emergency access planning.
Wildfire	The entire District is located in the very high Fire Hazard Severity Zone. Wildfire remains a high-priority hazard and the District's top concern due to its potential to damage electric and water infrastructure, disrupt power delivery, and threaten employee safety. Mitigation strategies include vegetation management, Public Safety Power Shutoffs (PSPS), system hardening, and interagency coordination with fire and emergency management partners.

37.8 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous MJHMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

37.8.1 Changes in Community Priorities

The District places a high priority on strengthening the resilience and reliability of essential utility services. This includes ensuring safe and dependable water and electric systems, reducing vulnerability to natural hazards such as wildfire and earthquakes, and improving emergency preparedness. Efforts focus on enhancing infrastructure durability, managing vegetation to reduce fire risk, and maintaining operational readiness through training and coordinated response planning. These priorities aim to protect public safety, safeguard critical assets, and support continuity of service during emergencies.

37.8.2 Past Mitigation Action Status

Truckee Donner PUD did not participate in the 2021 Placer County LHMP. The District is a participating jurisdiction in the 2023 Nevada County MJHMP, where information regarding assets and infrastructure owned by the District in Nevada County may found. This plan focuses on the assets and infrastructure owned by the District in Placer County. Therefore, there are no mitigation actions related to Placer County in a prior plan.

37.8.3 Hazards Omitted from Mitigation Strategy

Truckee Donner PUD did not omit any hazards from their mitigation strategy.

37.8.4 Mitigation Action Summary and Prioritization

The mitigation strategy (presented in the following section) lists the mitigation actions that Truckee Donner PUD would like to pursue in the future to reduce the risk from hazards.

Table 37-14 indicates the range of categories represented by the proposed mitigation actions, as well as the hazards addressed. The FEMA mitigation action categories indicated in the table are described in the mitigation strategy chapter of Volume 1.

Table 37-14. Analysis of Mitigation Actions by Hazard and Category

Hazard	LPR	SIP	NSP	EAP
Avalanche	X	X	X	-
Dam and Levee Failure	X	X	X	-
Drought and Water Shortage	X	X	-	-
Earthquake	X	X	X	-
Flood	X	X	X	-
Freeze and Snow	X	X	X	-
Heavy Rains and Storms	X	X	X	-
High Winds and Tornadoes	X	X	X	-
Landslides, Mudslides, and Debris Flows	X	X	X	-
Wildfire	X	X	X	-

LPR = Local Plans and Regulations
NSP = Natural Systems Protection
SIP = Structure and Infrastructure Project
EAP = Education and Awareness Programs
Note: Volume 1 of the MJHMP describes each of the mitigation action categories.

Volume 1 identifies four evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric score is assigned for each of the evaluation criteria. Table 37-15 provides a summary of the prioritization of all proposed mitigation actions for the MJHMP.

Table 37-15. Mitigation Strategy Prioritization

Action Number	Project Name	Objectives Met	Timeline	Benefits	Costs	Score	Priority
TDPUD-01	Water System Hydrant Spacing	8	1-5 Years	High	High	8	Medium
TDPUD-02	EOP Implementation & ICS Training	8	1-10 years	Medium	Medium	7	Medium
TDPUD-03	Electric Utility Preemptive De-energization Program	8	1-10 Years	Medium	Medium	7	Medium
TDPUD-04	Enhanced Vegetation Management for High Wildfire Areas and Sectionalization	8	1-10 Years	High	High	7	Medium
TDPUD-05	Enhanced Electric Overhead System Hardening	8	1-10 Years	High	High	7	Medium
TDPUD-06	Vegetation Management in Right of Ways and Utility Easements	8	1-10 Years	High	High	7	Medium
TDPUD-07	Earthquake Identification and Hardening Project	8	1-10 Years	Medium	High	6	Medium

Note: Volume 1 of the MJHMP provides the methodology and formula for prioritizing mitigation actions. Low (0-6), Medium (>6 and <8), High (8-11).

37.8.5 Mitigation Strategy

Table 37-16 lists information on each mitigation action, including the project description, the hazards addressed, lead and supporting agencies, and potential sources of funding. Truckee Donner PUD will be the lead agency for implementing all projects listed. The actions are dependent upon available funding and may be modified or omitted at any time based on the occurrence of new hazard events and changes in District priorities.

Table 37-16. Mitigation Strategy

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
TDPUD-01	Water System Hydrant Spacing	TDPUD is working to decrease the spacing of water system hydrants to align with the industry standards set by the AWWA. This project would involve installing additional hydrants in strategic locations to ensure optimal coverage and water availability for fire protection. By implementing this solution, TDPUD aims to enhance fire-fighting capabilities, improve community safety, and protect property from fire-related damage.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire	TDPUD Water Operations	None	Operational Funds, FEMA Hazard Mitigation Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
TDPUD-02	EOP Implementation and ICS Training	TDPUD will provide comprehensive training to all staff members on the 2025 EOP. This training will include detailed instructions on emergency procedures, roles and responsibilities, and the use of emergency equipment. By implementing this training program, TDPUD aims to enhance staff preparedness, improve response times, and ensure the safety and continuity of utility services during emergencies.	Avalanche, Dam and Levee Failure, Drought and Water Shortage, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire	TCPUD General Menager	TDPUD Risk, TDPUD Operations	Operational Funds, FEMA Hazard Mitigation Grant Program
TDPUD-03	Electric Utility Preemptive De-energization Program	TDPUD will develop and implement an Electric Utility Preemptive De-energization Program. This program will involve strategically shutting down power in high-risk areas during extreme weather conditions to prevent TDPUD's electric utility infrastructure from being the source of a catastrophic wildfire. This project involves the need for both capital investment (situational awareness, sectionalizing, and system controls) along with the comprehensive training that will be provided to staff on the procedures and protocols for preemptive de-energization. By implementing this program, TDPUD aims to enhance community safety, protect critical infrastructure, and ensure a rapid and coordinated response to potential wildfire threats.	Earthquake, Wildfire, High Winds and Tornadoes	TCPUD General Menager	TDPUD Risk, Operations, and Electric	Operational Funds, FEMA Hazard Mitigation Grant Program
TDPUD-04	Enhanced Vegetation Management for High Wildfire Areas and Sectionalization	TDPUD is working to implement an enhanced vegetation management project focused on high wildfire risk areas and sectionalization to allow for targeted preemptive de-energizations. This project would involve enhanced clearing and maintenance of vegetation near power lines to reduce the risk of TDPUD infrastructure being the ignition of catastrophic wildfires. Additionally, TDPUD would implement sectionalization strategies to isolate and protect critical circuits during preemptive de-energizations. By executing this program, TDPUD aims to further mitigate wildfire risks, protect infrastructure, and ensure the safety and reliability of utility services for the community.	Earthquake, Wildfire, High Winds and Tornadoes, Landslides Mudslides and Debris Flow	TDPUD Electric	None	FEMA Hazard Mitigation Grant Program

Action Number	Project Name	Project Description	Hazards Addressed	Lead Agency	Support Agency	Sources of Funding
TDPUD-05	Enhanced Electric Overhead System Hardening	TDPUD is working to undertake an Enhanced Electric Overhead System Hardening project. This project would involve upgrading and reinforcing the electric overhead infrastructure to withstand severe weather conditions and reduce wildfire risks. Measures would include undergrounding overhead power lines, installing covered conductor, replacing and/or hardening overhead power poles, and installing advanced controls. By executing this project, TDPUD aims to improve the resilience and reliability of the electric overhead system, ensuring continuous and safe utility services for the community.	Earthquake, Freeze and Snow, Wildfire, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Heavy Rains and Storms	TDPUD Electric	None	FEMA Hazard Mitigation Grant Program
TDPUD-06	Vegetation Management in Right of Ways and Utility Easements	To address these challenges, a collaborative project has been initiated between the Town of Truckee and TDPUD. This project focuses on enhanced vegetation management within Town Rights of Way and TDPUD Public Utility Easements. By clearing overgrowth and mitigating fire hazards along key evacuation routes, the project aims to improve safety and accessibility. Additionally, the project includes hardening the TDPUD Electric Overhead System to enhance its resilience against extreme weather events and reduce the likelihood of potential impacts to evacuation routes. This comprehensive approach will ensure safer and more reliable evacuation routes for the community.	Avalanche, Dam and Levee Failure, Earthquake, Flood, Freeze and Snow, Heavy Rains and Storms, High Winds and Tornadoes, Landslides Mudslides and Debris Flow, Wildfire	TDPUD Electric	Town of Truckee	FEMA Hazard Mitigation Grant Program
TDPUD-07	Earthquake Identification and Hardening Project	TDPUD is working to undertake an Earthquake Identification and Hardening Project. This project would involve a comprehensive assessment of all facilities to identify vulnerabilities to seismic activity. Based on the findings, TDPUD would implement targeted hardening measures to reinforce structures and systems, ensuring they can withstand earthquakes. By executing this project, TDPUD aims to enhance the resilience of its facilities, maintain continuous utility services, and protect the safety of the community during seismic events.	Earthquake	TDPUD Water Operations	TDPUD Risk, Operations, and Electric	FEMA Hazard Mitigation Grant Program