TEHAMA COUNTY SAFETY, SECONDARY ACCESS, COMMUNITY PLANNING & EVACUATION PLANNING STUDY FINAL DRAFT - JUNE 2024



PREPARED BY THE TEHAMA COUNTY TRANSPORTATION COMMISSION



IN PARTNERSHIP WITH









Tehama County Transportation Commission Resolution No. 09-2024

ADOPT THE TEHAMA COUNTY SAFETY, SECONDARY ACCESS, COMMUNITY PLANNING & EVACUATION PLANNING STUDY

WHEREAS, the Tehama County Transportation Commission is the Regional Transportation Planning Agency (RTPA) for the County of Tehama and the Cities; **and**

WHEREAS, Commission staff applied for, and secured funding, to develop a Safety, Secondary Access, Community Planning & Evacuation Planning Study; **and**

WHEREAS, Green DOT Transportation Solutions, in partnership with Headway Transportation, and Deer Creek Resources, developed the plan through significant public outreach and data analysis; **and**

WHEREAS, the draft study was circulated for stakeholder and public comment for 60 days incorporating all available information; **and**

WHEREAS, upon completion the draft plan was presented at a publicly held meeting; and

WHEREAS, the Tehama County Transportation Commission staff have found the plan to be comprehensive and accurate

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Tehama County Transportation Commission that the Safety, Secondary Access, Community Planning & Evacuation Planning Study be adopted and utilized for future funding applications and safety projects.

The foregoing Resolution was offered by Commissioner Moule and seconded by Commissioner Nolen on June 24, 2024, and adopted by the following vote:

AYES: Hansen, Hurton, Nolen, Demo, Bacquet, Moule NOES: None
ABSENT OR NOT VOTING: None
STATE OF CALIFORNIA)
)ss

COUNTY OF TEHAMA)

I, JENNIFER VISE, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California, hereby certify the above and foregoing to be full, true, and correct copy of an order adopted by said Tehama County Transportation Commission on this 24th day of June 2024.

JENNIFER VISE, County Clerk and Ex-Officio Clerk of the Board of Supervisors of the County of Tehama, State of California

By: Ul fas Wy

ACKNOWLEDGEMENTS



Prepared for

Tehama County
Transportation Commission







Prepared by

Green DOT Transportation Solutions
Headway Transportation
Deer Creek Resources

This Study was funded by the Caltrans Sustainable Communities Competitive Planning Grant Program and the CAL FIRE Wildfire Prevention Grant Program utilizing funding from the California Climate Investments Program, with additional funding from the CalOES Next Generation 911 Project.

This Study was a collaborative effort between TCTC, the project team, project partners, and the Tehama County community.

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1. EXECUTIVE SUMMARY

The Tehama County Safety, Secondary Access, Community Planning and Evacuation Routing Study, herein referred to as the Evacuation and Routing Study, is a comprehensive analysis conducted to identify locations and communities within Tehama County that are at a high risk of experiencing wildfires, flooding, or hazardous materials exposure. Throughout the County, evacuation improvements have been identified by utilizing strategies aimed at ascertaining communities with insufficient ingress and egress evacuation routes, addressing local community fire evacuation concerns, and enhancing evacuation operations with improved communication tactics. Tehama County worked in collaboration with the California Department of Forestry and Fire Protection (CAL FIRE), the California Governor's Office of Emergency Services (Cal OES), and the Tehama County Sheriff's Office, with assistance from transportation planners, engineers, and evacuation consultants including Green DOT Transportation Solutions, Deer Creek Resources, and Headway Transportation to design and implement this study. To ensure the development of a comprehensive report, consistent community workshops and meetings were scheduled throughout the study and key local evacuation issues were addressed and well documented.

By integrating a holistic approach which considers historical data, geographical factors, wildfire risks, and community feedback, this study comprehensively identifies critical areas in need of improved roadway infrastructure and strategic enhancements. Leveraging insights from CAL FIRE data and community input, the study strategically addresses bottlenecks, historical fire risk, and flood-prone regions to propose vital modifications that bolster evacuation efficiency and mitigate potential disasters. This study is structured around the primary objective of assessing existing conditions, evaluating hazards, and addressing vulnerability, all while formulating robust action policies, evacuation improvement projects, and effective public engagement strategies. The initial phase of this study entails a thorough analysis of historical fire patterns, resource assessments, and evacuation requirements, with a specific focus on safeguarding vulnerable communities. The goal of this study is to enhance Tehama County's resilience and preparedness, ensuring the safety and well-being of its residents during emergency situations. The report is structured into four primary sections:

- EXISTING CONDITIONS AND HAZARD EVALUATION: This section assesses the relative risk of
 wildfires across Tehama County, providing insights into areas more susceptible to wildfire incidents. It
 includes an overview of existing conditions maps, fire severity zones, wildland-urban interface data,
 historic fire footprints, existing flood conditions and history, CAL FIRE subdivision review vulnerability
 assessments, and examples/best practices.
- ANALYSIS AND RECOMMENDATIONS: This section delves into action policies and introduces a webbased mapping and resource center. It identifies potential challenges and barriers to effective communication during evacuation preparation and execution. It also provides recommendations to improve communication methods for enhanced public safety.
- **3. PRIORTIZED PROJECT LIST:** Prioritized project list based on policies and recommendations gleaned from the study overall.
- 4. COMMUNITY AND STAKEHOLDER ENGAGEMENT: This section details public outreach efforts, stakeholder questionnaires, and summarizes the outreach activities to engage communities and stakeholders effectively.

This comprehensive study serves as an invaluable resource for Tehama County's emergency preparedness and response. It offers an in-depth assessment of wildfire risk, evacuation requirements, and communication strategy improvements tailored to each vulnerable community while providing a list of essential projects in each community.

2. INTRODUCTION

The Tehama County Emergency Evacuation and Routing Study serves as a comprehensive guide to enhance the County's overall preparedness capabilities in the event of an emergency. Its primary focus revolves around the development and upkeep of evacuation strategies, infrastructure enhancements, and community engagement endeavors necessary to enable efficient responses to a wide range of hazards that Tehama County may confront.

To enhance community safety during emergencies, this study conducts a thorough evaluation of evacuation routes spanning the entirety of the County. Emergency evacuations, being unforeseeable and inevitable events, underscore the significance of readiness to efficiently relocate individuals and resources to secure locations. These events, arising from both natural and human causes such as wildfires, floods, lightning storms, seismic activity, utility failures, vehicular accidents, and human error, can lead to situations demanding immediate evacuations.

The historical context of fire suppression practices, prolonged drought conditions, and more frequent extreme weather patterns, has compounded the severity of emergency situations. These new environmental challenges, attributable to human-induced climate change, have necessitated a reevaluation of emergency response strategies. Recent incidents like the Lahaina Fire in Maui and the Camp Fire in Paradise have underscored the urgent need for improved evacuation planning. These devastating fires, characterized by their catastrophic nature, revealed the critical importance of preparedness as people struggled to escape impending danger due to limited evacuation measures.

Within this study, a comprehensive analysis is conducted to identify evacuation bottlenecks and assess access routes. The goal is to ensure that residents can swiftly and effectively exit hazardous situations, allowing crucial time for emergency services to arrive and provide assistance. This introduction encapsulates the pivotal findings and recommendations that have emerged from this study, laying the groundwork for a safer and more resilient Tehama County in the face of future emergencies.

Tehama County faces a range of hazards, with wildfires and floods being of primary concern due to the County's geography and climatic conditions. Comprehensive research has pinpointed high-risk areas, enabling prioritization of roadway, bridge, and hazard mitigation projects. The study delves into the existing roadway system, revealing limitations in capacity, redundancy, and suitability for rapid evacuations. Communities with few and unsuitable ingress egress (enter and exit) evacuation points have been identified and positioned for additional roadway enhancements and infrastructure projects. Project recommendations emphasize the need for new roadways, roadway improvements, extensive communication systems, and hazard mitigation projects to optimize evacuation routes. Extensive community engagement, particularly with high-risk communities, has yielded invaluable insights into local knowledge, potential solutions, and challenges linked to emergency evacuations and routing. Collaborative efforts with the local communities have aided in identifying suitable shelter locations and the creation of effective evacuation routes.

The Tehama County Emergency Evacuation and Routing Study not only identifies critical vulnerabilities but also presents actionable solutions that will significantly bolster the County's preparedness for all hazards. By investing in infrastructure improvements, continuing community engagement efforts, and enhancing communication and coordination, Tehama County can achieve its organizational priorities and provide a safer environment for its residents. This study serves as a foundation for the County's ongoing commitment to resilience and preparedness, ensuring a more robust response to future emergencies.

The data analysis focused on the risks of floods in historic flood zones, wildfires in both wildland and urban areas, historic frequency of burns and fire incidents, and identified ignition hotspots, and evaluated this data in reference

to the existing conditions and identified flaws of the roadway network and evacuation system. These comprehensive assessments of hazards and vulnerabilities along roadways using Geographic Information Systems (GIS) identified high-risk evacuation locations to propose future evacuation projects to be developed. This study also emphasizes community and stakeholder engagement through public outreach and stakeholder questionnaires. Evacuation notifications and low-tech solutions like alarm systems were recommended by the community and are included in the project recommendation list as a Countywide improvement. The end of this report summarizes the findings and provides a list of projects at different levels of priority for implementation.

2.1 BACKGROUND

Tehama County, located in the northern part of California, is a region known for its diverse geography and historical significance. Situated between the Sierra Nevada Mountains to the east and the Coast Range Mountains to the west, Tehama County offers a variety of landscapes, including agricultural plains, rolling hills, meandering rivers, and wooded areas. This diverse topography influences the County's unique character and presents certain challenges. The County seat, Red Bluff, serves as the central administrative and cultural hub. Tehama County encompasses several other towns, hamlets, and rural areas, each with its own distinct identity. Agriculture plays a significant role in Tehama County's economy, with the region known for the cultivation of crops such as almonds, walnuts, rice, and various fruits. These agricultural activities contribute not only to the local economy but also to California's broader agricultural industry. The Tehama District Fairgrounds, host to the annual Tehama District Fair, reflects the County's strong agricultural tradition. Outdoor recreational opportunities are abundant in Tehama County, with the Sacramento River offering fishing, boating, and water-related activities. Nearby natural areas like Lassen Volcanic National Park and the Sacramento River Bend Outstanding Natural Area provide opportunities for hiking, camping, and nature exploration. The County's vast open spaces and rugged terrain make it a popular destination for outdoor enthusiasts, while its proximity to natural wonders like Mount Shasta and the Cascade Range enhances its appeal. Tehama County places a strong emphasis on community well-being, with local government agencies, law enforcement, and community organizations working collaboratively to ensure the safety and prosperity of its residents. Overall, Tehama County is a region characterized by its diverse landscapes, agricultural productivity, and commitment to community welfare. Its natural beauty and dedicated community efforts make it a unique part of California.

Tehama County, like many areas in California, faces significant flood and fire hazard risks due to its diverse geography and climatic conditions. Tehama County is no stranger to the threat of wildfires. The region's hot, dry summers, coupled with periodic drought conditions, create an environment ripe for wildfires. The combination of arid vegetation and windy conditions during certain seasons increase the likelihood of wildfires spreading rapidly. The County features areas where urban development meets or intermingles with wildland areas. These wildland-urban interfaces pose heightened wildfire risks as they increase the potential for human-caused fires and make evacuation procedures more complex. Tehama County has witnessed several historical wildfire events. These incidents provide valuable data and underscore the persistent risk, particularly in areas with a history of fire outbreaks. The County's landscape includes dense vegetation, which can serve as fuel for wildfires. Dry grasslands, forests, and brush areas are all susceptible to ignition.

Tehama County is crisscrossed by numerous rivers, including the Sacramento River and its tributaries. While these waterways are essential for agriculture and local ecosystems, they also pose flood risks, particularly during periods of heavy rainfall or snowmelt. The County is protected by a network of levees and flood control infrastructure. The integrity of these levees is crucial for preventing river flooding, and any breach or failure can result in significant flooding. Intense rain events can trigger flash floods in areas with poor drainage systems. The combination of steep terrain and heavy rainfall can lead to swift and dangerous floodwaters. The county's development patterns,

including communities and infrastructure situated in floodplains, can increase the vulnerability to flood events. Changes in climate patterns, such as prolonged droughts followed by heavy precipitation, can exacerbate flood risks. Drier soil during droughts may not absorb water effectively, increasing the likelihood of runoff and flooding when rains return. Flatland areas with poor drainage can flood due to their inherent characteristics and specific environmental conditions. Flatland areas, as the name suggests, have minimal variations in elevation. In such regions, water does not naturally flow away or drain easily because there are no slopes or gradients to guide it elsewhere. As a result, when rainfall or snowmelt occurs, the water tends to accumulate on the flat surface.

In urban or developed flatland areas, there are often impervious surfaces like roads, parking lots, and buildings. These surfaces do not absorb water. Instead, they facilitate rapid runoff. As water flows over these surfaces, it can quickly accumulate in low-lying areas, leading to localized flooding. Flatland areas may lack adequate drainage systems, including stormwater drains, ditches, and culverts. Without these infrastructure elements, there is no efficient way for excess water to be channeled away from the flatlands. Consequently, water collects on the surface. Even in undeveloped flatland areas, the soil may become saturated during prolonged periods of rainfall or snowmelt. Once the soil is saturated, it loses its capacity to absorb additional water. Excess water then pools on the surface, causing flooding. Flatland areas are often adjacent to bodies of water, such as rivers or lakes. These water bodies may experience overflow during heavy precipitation or snowmelt events, and the water can spill over into the nearby flatlands, causing flooding.

Early warning systems and emergency preparedness are critical to protecting people and property when flooding events occur in these regions. To address these risks, Tehama County has created the Tehama County Evacuation and Routing Study, to enhance safety during wildfire and flood evacuations. These efforts involve collaboration with state agencies like CAL FIRE and Cal OES, local law enforcement, and community stakeholders. The County continually works on improving its communication strategies and enhancing its evacuation operations to protect residents and assets during emergencies. These challenges underscore the need for a comprehensive approach to disaster preparedness and mitigation in Tehama County, encompassing risk assessment, infrastructure improvements, and community engagement.

3. EXISTING CONDITIONS AND HAZARD ANALYSIS

The climate in Tehama County is typical of that of the Central Valley, with warm, dry summers and mild, wet winters. This is conducive to ranching, farming, timber production, and widespread recreation that are all important to the economy and quality of life in the County. It is also conducive to weather occurrences such as wildfires and flooding, which are evident throughout the County's history. As the climate continues to change with periods of extensive drought and elevated heat in the summer as well as increased precipitation in the winter, it is of utmost importance to assess how communities will be affected by these natural disasters. Available data and analysis from CAL FIRE and Cal OES act as the starting framework for assessing the most vulnerable communities in the County.

3.1 HISTORIC FIRE PERIMETERS

California has a long-standing history of extreme wildfires, the most destructive and lethal of which primarily occurring in the last five years. The largest fire in California history, the August Complex Fire, burned over 1 million acres including portions of Tehama County. The second largest wildfire in California history was the Dixie Fire of 2021. Although much of its footprint was east of Tehama County, the landscape and topography of Tehama County in the foothills area is very similar to the Dixie Fire area and should be noted regarding fuel load and topography. Additionally, south of Tehama in Butte County, the Camp Fire of 2018 completely devastated and flattened the Town of Paradise. This incident was the deadliest wildfire in California history and among the most lethal fires in U.S. history, causing 85 deaths.

In the Tehama County and Tehama-Glenn region, CAL FIRE has recorded 34 fires that have burned 100 acres or more in the last 10 years. Of the 13 wildfires that burned over 1,000 acres, 12 of them have occurred in the last five years — most notably the August Complex Fire and Dixie Fire.

The history of fire in Tehama County dating from 1950 to 2022 is depicted in Figure 1. The western region of the County and the Rancho Tehama community have experienced the most recent fire perimeter. The communities of Mill Creek and Mineral have had recent, close encounters as well. The eastern foothill region has encountered varied fire footprints over the last 50 years. The communities that surround I-5 and those just to the west of the major highway, have encountered a scattered frequency of fires throughout the last 50 years. It is important to acknowledge historic fire footprints because areas that have burned in the recent past might have reduced fuel loads conversely, areas that haven't burned, have greater fuel loads making them potentially hazardous.

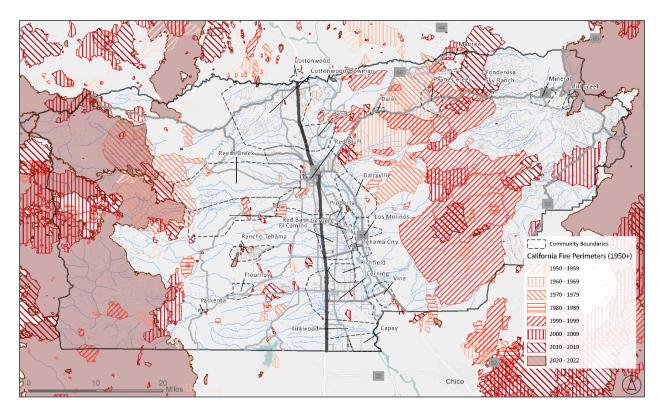


Figure 1 - Historic Fire Perimeters

3.2 FIRE AND RESOURCE ASSESSMENT

FEDERAL, STATE, AND LOCAL RESPONSIBILITY AREAS

The responsibility of wildland fire protection falls into three distinct areas within the State of California: Federal Responsibility Area (FRA), State Responsibility Area (SRA), and Local Responsibility Area (LRA). These distinctions for Tehama County are depicted in Figure 2.

An FRA is an area where the federal agencies have primary financial responsibility for wildland fire protection and prevention. These areas include lands that are under federal ownership.

An SRA is where the state has primary financial responsibility for wildland fire protection and prevention. The Board of Forestry and Fire Protection have detailed procedures to define an SRA. Generally, the lands under this classification are state and privately-owned forest, watershed, and rangelands. There are a few reasons that land will be removed from an SRA including when they become incorporated by a city, change ownership to the federal government, or become more densely populated. All the SRA is classified into Fire Hazard Severity Zones (FHSZs).

An LRA is an area where the local government is responsible for wildfire protection which is typically provided by city fire departments, fire protection districts, and/or counties. The Tehama County Fire Department (TCFD) and CAL FIRE have been in a cooperative agreement to manage and provide all-risk fire and emergency medical services to unincorporated areas of the County since 1927. In an LRA, FHSZs are determined through an extension of the SRA FHSZ model.

WILDLAND URBAN INTERFACE

The Wildland Urban Interface (WUI) is a term for an area where unoccupied land meets or intermingles with structures and other human-developed land. When a wildfire results in "disastrous property losses", it is considered to be a WUI fire. WUI is often broken down into two (2) types based on housing density and defined by CAL FIRE as below:

- Interface High-density development adjacent to undeveloped wildland vegetation.
- Intermix Lower-density housing mingled with undeveloped wildland vegetation.

Understanding the WUI in Tehama County is a priority since these are areas which may have increased potential of wildfire ignition that harms residents and property. WUI locations within Tehama County are depicted in Figure 2. Generally, there is Wildland Urban Intermixing located where there are communities in Tehama County.

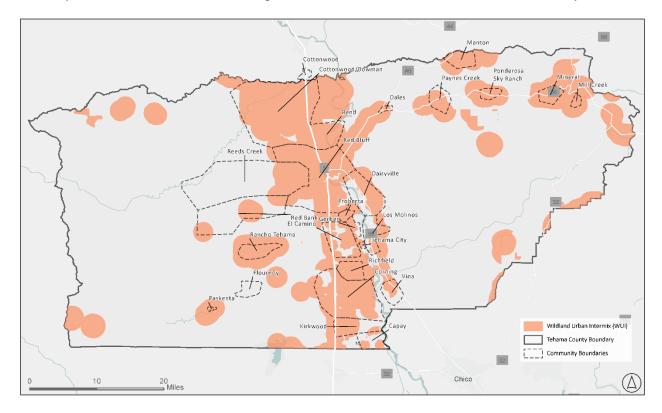


Figure 2 - Wildland Urban Interface (WUI)

FIRE HAZARD SEVERITY ZONES

Areas that are at risk for interface fire loss are referred to by law as Fire Hazard Severity Zones (FHSZs). CAL FIRE is mandated to evaluate the "hazard" of an area, which are the physical conditions prior to mitigation that create a likelihood and expected fire behavior. A hazard score is assigned based on many factors that influence fire likelihood and behavior, including fire history, natural vegetation, terrain, typical fire weather, etc. This Study utilizes the FHSZ data from CAL FIRE that was adopted in 2007 and 2008, however, it is important to note that they are in the process of updating these zones to better reflect more recent extreme weather events and conditions from the changing climate.

The FHSZs for the State Responsibility Area in Tehama County are depicted in Figure 3. Note that the regions that are not classified in an FHSZ are either in a Federal or Local Responsibility Area, it does not necessarily indicate a

lack of hazard. Hazard severity is Very High in the westernmost and eastern foothill portion of the County and along SR-36 in mountainous, wooded, evergreen forest areas. The hazard severity is moderate in the region directly west of I-5 and south of SR-36, however, the communities located within this region lie in high and very high FHSZs. The hazard severity is also moderate directly east of SR-99 but transitions to High and Very High moving eastward.

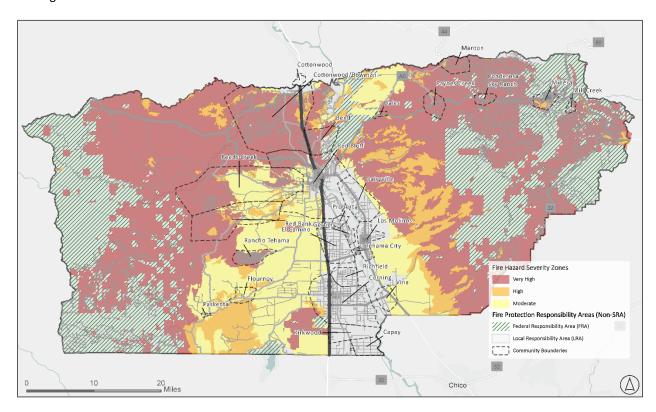


Figure 3 - Fire Hazard Severity Zones

RELEVANT FIRE HAZARD SEVERITY ZONE REGULATIONS

The classification as a State or Local Responsibility Area as well as the Fire Hazard Severity Zone (FHSZ) classification has a direct effect on the requirements for landowners and development in these regions. Regulations include but are not limited to those mentioned in this section.

The WUI Building Codes (California Building Code (CBC) Chapter 7A) aim to reduce the risk of building ignition from embers fanned by wind-blown fires. They apply to all buildings in the SRA regardless of fire hazard severity; in the LRA, they only apply to the design and construction of new buildings in High and Very High FHSZs. Additionally, Government Code Section 51182 requires defensible space clearing and other building safety practices for wildland fires. As of June 2021, AB28 requires any property that is in a High or Very High FHSZ to have a compliant Defensible Space Inspection prior to being sold.

3.3 CAL FIRE SUBDIVISION REVIEW VULNERABILITY ASSESSMENT

The following section provides an overview of CAL FIRE's Vulnerability Assessment for subdivisions located in the State Responsibility Area (SRA) or a Local Responsibility Area (LRA) Very High Fire Hazard Severity Zone. The CAL FIRE report was created to address wildfire prevention focusing on safety improvements and risk mitigation.

While some of the following subdivisions have the same names as the above communities in the community profiles section, note that these following subdivision areas are names of subdivisions and are distinct from the community profile areas in the section above. For consistency, these subdivisions have been grouped by which community they fall into.

Subdivisions were identified pursuant to Section 51178 of the Government Code. The areas were selected as having significant fire risk with more than 30 dwelling units without a secondary means of egress route. The Board of Forestry and Fire Protection (the Board) collaborated with the State Fire Marshal to identify subdivisions based on this criterion.

- By most recent Census data available / internet search. Where number of housing units available, population = 2.63 people per household
- Median Household Income \$35,000-\$50,000; \$50,000-\$75,000; \$75,000-\$100,000
- Percent Population greater than 65 years: >25%; 20%-25%; <20%
- Potential Recommendations (CAL FIRE Report):

THE CAL FIRE/CAL OES SUBDIVISION REPORT CREATED THE FOLLOWING LIST OF RECOMMENDED STRATEGIES. IMPORTANTLY, THESE STRATEGIES WERE INCORPORATED INTO THIS STUDY'S RECOMMENDATIONS AND PROJECTS WHEN APPROPRIATE.

- 1. Create secondary access to the subdivision.
- 2. Make improvements to the existing secondary access to the subdivision.
- 3. Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
- 4. Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices.
- 5. Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
- 6. When side street parking near Right of Ways the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

- 7. Conduct community-wide evacuation drills.
- 8. Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

FOR DETAILED CAL FIRE / CAL OES REPORTS FOR EACH OF THE SUBDIVISIONS, PLEASE REFER TO APPENDIX A

3.4 FLOOD CONDITIONS & HISTORY

Many of the communities in Tehama County have low wildfire risk but have much higher chances of getting stranded in dangerous situations while trying to escape flood conditions. While many historic floods are not on record, all community areas near streams, creeks, and rivers, are potential flooding sites in this study. The years 1986 and 1997 are marked as regionally significant flooding years in flood hazard areas for all of Tehama County. The significant flooding years are described in Table 1.

Table 1 - Notable Flood Years

Year	Fatalities	Evacuation Numbers	Damage to Homes	Damage to Businesses
1986	13	50,000	14,000	1,100
1997	N/A	120,000	30,000	2,000

Flooding in California may be caused by the following factors, or a combination of the following factors: excessive snowmelt, excessive rainfall, excessive runoff, levee failure, and poor planning of built infrastructure in the flood plain. Climate change in California is resulting in more frequent extreme weather events producing major floods, greater atmospheric rivers, and inability for the Sierra Nevada Mountain Range to store water. Floods pose a serious risk for evacuation. Flooding can block roadways, submerge cars, inundate the built environment, and inhibit emergency services. Flood zones categorized by 100-year, 500-year and 1000-year floods have become more frequent events and the built environment within these flood zones have faced tremendous challenges as a result. The history of flooding is extensive, however there is minimal data on where flood events occur geographically in the flood plain.

Historically, 1986, 1997, and 2017, are marked as regional flooding years in flood hazard areas for Tehama County. The time from December 1861 until January 1862, was known as the Great Flood for the Sacramento and San Joaquin Valleys. This extreme event resulted in 300 miles of inundation in the area. In 1909, the California Flood caused the Sacramento River to flood Fort Ross in the Feather River Basin area. In 1986, floods killed 13 people in California and forced the evacuation of 50,000 Californians from their homes. Flooding around the Sacramento River, streams, and creeks in Tehama County can potentially cause future evacuation issues.

The following maps were developed with data provided by the Department of Water Resources:

- Figure 4 depicts flood information in Tehama County and illustrates the Special Flood Hazard Areas with a 1% chance of annual flood risk. These high-risk areas are categorized as AE (high risk regulatory floodway), A (high risk without base flood elevation), and AO (high risk regulatory floodway), which will be used to evaluate evacuation routes for this study.
- Figure 5 depicts historic floods from 1983, 1986, 1995 and 1997. The overlapping floods show the extent of the changing patterns over the years. Historic floods have affected several of the County's priority evacuation communities including Lake California, Red Bluff, Proberta, Las Flores, Gerber, Los Molinos, El Camino, Richfield, Vina, and Kirkwood.

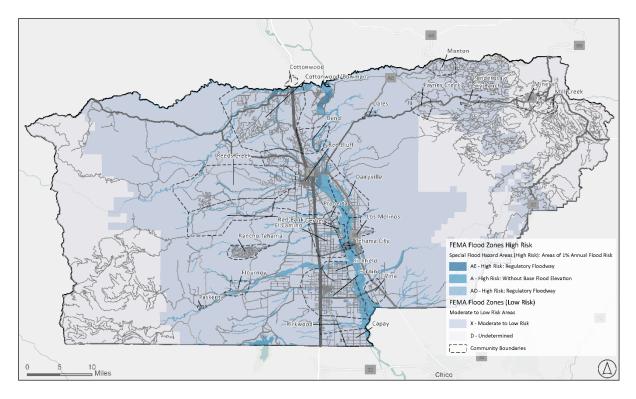


Figure 4 - Flood Hazard Zones

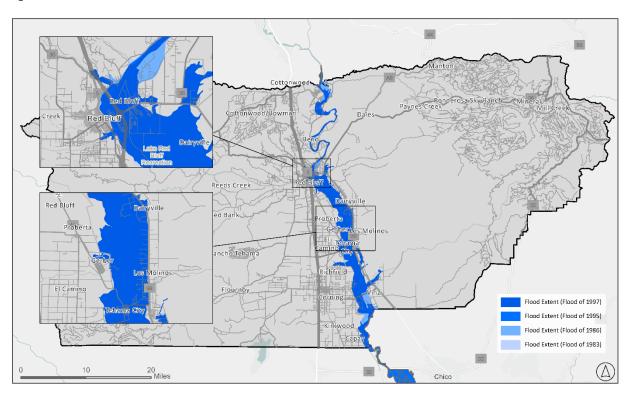


Figure 5 - Historic Floods

3.5 DOCUMENT REVIEW / PLAN ANALYSIS

Tehama County has several plans and studies documenting various aspects of transportation planning, emergency response, hazard identification and mitigation. The following documents were reviewed by the project team and incorporated and ensured consistencies when appropriate into the final study:

- Tehama County Active Transportation Plan
- Tehama County Emergency Operations Plan
- Tehama County General Plan Update 2009-2029
- Tehama County Hazard Mitigation Plan
- Tehama County Regional Transportation Plan
- Tehama Wildlife Area Vegetation Management Plan (Resource Conservation District of Tehama County)
- 2020 Tehama East/West Community Wildfire Protection Plans (CWPP)
- Community Specific Evacuation Plans including:
- Lake California Multi-Hazard Emergency Evacuation Plan
- Rancho Tehama Multi-Hazard Emergency Evacuation Plan
- Manton Multi-Hazard Emergency Evacuation Plan
- Coordinated Public Transit Human Services Transportation Plan
- Transit Asset Management Plan
- Public-facing websites and other documentation on emergency preparedness and evacuation

EXISTING DOCUMENT REVIEW

TEHAMA COUNTY ACTIVE TRANSPORTATION PLAN (ATP) - ADOPTED JUNE 2019

Discusses the benefits of and process for planning for multimodal improvements. The ATP lists recommended multimodal projects. Some multimodal improvements, such as multi-use paths and bicycle lanes, may facilitate an evacuation by providing extra lanes during an evacuation for emergency responders. Needs identified in this evacuation project may help to set the priority of ATP projects.

TEHAMA COUNTY REGIONAL TRANSPORTATION PLAN (RTP) - ADOPTED MARCH 2020

The plan makes general reference to evacuation, and states objectives to comply with any regional emergency preparedness and disaster evacuation plans. The plan also states that "The best preventative measures with respect to this document for an emergency evacuation is the continued implementation of projects in the RTP that upgrade roadways, airport facilities, and public transit." The RTP lists the roadway, bridge, transit, and multimodal planned projects. Needs identified in this evacuation project may help to set the priority of RTP projects. The plan also contains traffic volumes, Vehicles Miles Traveled (VMT) and descriptions of major routes that will be helpful in

analyzing and prioritizing roadway needs.

TEHAMA COUNTY EMERGENCY OPERATIONS PLAN 2017

This plan discusses emergency preparedness, communication structures, information sharing and recovery. The plan discusses the prevalent threats to the area and the Standardized Emergency Management System (SEMS). A current update for the Plan is in the development stage.

TEHAMA COUNTY GENERAL PLAN UPDATE 2009-2029

This plan outlines land use planning and economic goals for the region. The report discusses high-level transportation and circulation priorities and discusses the need to identify evacuation routes.

TEHAMA COUNTY HAZARD MITIGATION PLAN

This plan is general in terms of evacuation, and not specific to communities or routes. The plan discusses the Tehama Alert Systems and mentions the Emergency Action Plan (but does not include it). The document describes that a dam failure may result in limited warning for an evacuation and describes major transportation routes and bridges.

TEHAMA WILDLIFE AREA VEGETATION AND FUELS MANAGEMENT PLAN – RESOURCE CONSERVATION DISTRICT OF TEHAMA COUNTY (RCD)

The Tehama Wildlife Area Vegetation and Fuels Management Plan aims to manage vegetation and control wildfires within the Tehama Wildlife Area (TWA). The plan focuses on protecting watershed resources from wildfire impacts, managing vegetation to mimic natural ecological functions, and providing habitat for wildlife. It includes strategies for prescribed burning and other management practices to control large wildland fires and improve wildlife habitat.

2020 TEHAMA EAST/WEST COMMUNITY WILDFIRE PROTECTION PLANS (CWPP)

The Tehama East Tehama West CWPP is a comprehensive Community Wildfire Protection Plan (CWPP) focusing on the Tehama East and Tehama West regions. It outlines strategies and actions for reducing the risks and impacts of wildfires in these areas, emphasizing collaboration among local stakeholders, fire management agencies, and community members. The plans provide a detailed framework for wildfire prevention, preparedness, and response, tailored to the specific environmental and community needs.

COMMUNITY SPECIFIC MULTI-HAZARD EVACUATION PLANS

Community-specific evacuation plans emphasize emergency response systems and the prioritization of resident safety in urgent situations. The following multi-hazard evacuation plans are integral in guiding residents to safety during a range of emergency situations:

Lake California Multi-Hazard Emergency Evacuation Plan: Tailored for the Lake California area, this plan addresses efficient evacuation strategies and routes for both natural disasters and human-made threats.

Rancho Tehama Multi-Hazard Emergency Evacuation Plan: Focused on the Rancho Tehama community, this plan delineates detailed evacuation procedures, including protocols and coordination with local emergency services for an organized response.

Manton Multi-Hazard Emergency Evacuation Plan: This plan is designed for the Manton area and provides a

comprehensive approach to evacuations during crises. It emphasizes effective communication strategies and clear evacuation routes to ensure residents are well-informed and guided during such events.

COORDINATED PUBLIC TRANSIT - HUMAN SERVICES TRANSPORTATION PLAN

This study documents transit in Tehama County, particularly for disadvantaged groups. The study identifies current demographics and transit resources, unmet needs, and prioritizes strategies for improvement. This report discusses the importance of reliable transportation for emergency evacuations.

TRANSIT ASSET MANAGEMENT PLAN

This report lists the inventory (assets) and investment priorities for future fleet replacement or other important assets the County utilizes.

3.6 EXAMPLES / BEST PRACTICES

Evacuation plans for other California counties and agencies were reviewed for best practices and useful content that could be applied to Tehama County and incorporated when appropriate.

TOWN OF PARADISE, CA

Headway prepared the transportation components of the *Town of Paradise Transportation Master Plan 2022* (TMP). This plan was completed following the catastrophic 2018 Camp Fire which devastated most of the Town and severely impacted the infrastructure. The plan prioritized building back a resilient transportation network and emergency response/ evacuation planning. The Evacuation Planning component included:

- Recommendations for evacuation and emergency plans including Traffic Control Plans, public-facing maps and informational guides, and Contra-flow procedures.
- Permanent and/or temporary improvements to key evacuation route intersections, particularly ones identified as known or potential pinch points.
- Multi-agency Task Force coordination among 22 partner agencies to address region-wide evacuation needs. The purpose was to develop agreements and a plan among agencies for emergency traffic control at intersections and along road agreements outside the Town of Paradise for the full length needed for evacuation.
- A practical evacuation guide for the primary evacuation routes with maps indicating responsible
 agency and a plan for key intersections and segments, the number of travel lanes, a contraflow plan
 and potential cross-over points, intersection controls movement restrictions and median closures.
 The plan was prepared for the *entire length of the route*, *beyond the Town limits*, acknowledging that
 evacuation planning must extend to practical limits to ensure that residents are out of harm's way.

SAN BERNARDINO COUNTY, CA

The Emergency Operations Plan includes several sections:

- A chart showing each agency, the roles, and responsibilities.
- A matrix of departments and the primary and secondary emergency response roles.

The Hazard Mitigation Plan includes:

Reference to the "Ready SB: Smart Phone App which identifies evacuation routes and shelters.

CITY OF VENTURA, VENTURA COUNTY, CA

Ventura County published a series of maps for different areas indicating the evacuation roadways and directional routes to use in an evacuation.

4. COMMUNITY EVACUATION NEEDS ASSESSMENT

This chapter outlines existing characteristics and metrics as the starting framework for assessing communities in Tehama County and are combined and supplemented with the subdivision review analysis completed by CAL FIRE and Cal OES, which evaluated subdivision housing developments in the State, County by County, providing general recommendations for procedures and infrastructure to increase the safety for emergency evacuation processes in these communities.

4.1 FIRE BEHAVIOR MODELING AND VULNERABILITY ASSESSMENT

This section provides an assessment of the roadway network and related elements within Tehama County. The purpose is to determine the primary needs of each vulnerable community to develop recommendations that facilitate the safe and efficient evacuation of residents, visitors, animals, and resources.

Multiple factors were considered and analyzed to determine the specific needs of each community within Tehama County, including the following key factors:

- Demographics (population, vulnerable population, etc.)
- Roadway Network (number of access points, distance to I-5, pavement conditions)
- Risk Priority (number of structures, Fire Hazard Priority, shortest distance to recent fire perimeter)
- Macro Fire Behavior Modeling and LiDAR flight data analysis
- Public Outreach
- Other evacuation considerations (availability of shelters, assembly points, safe refuge areas, signage)

COUNTYWIDE EVACUATION ASSESSMENT METHODOLOGY

EVACUATION ROUTES

Primary and secondary evacuation routes are roadways most likely to be used in an evacuation; however, given the unpredictable nature of natural events, any roadway could become an evacuation route. The primary and secondary routes are shown on Figures 1a-1c, and a list is provided in Appendix A. Primary evacuation routes in Tehama County are Interstate 5 (I-5) and roadways classified as Arterials. Roadways classified as Collectors are secondary evacuation routes.

DEMOGRAPHICS

Demographic data was included as available and shows the estimated dwelling units or population used to assess the number of access points per population. Median household income and percent of elderly were included as indicators of the potential for vulnerable populations that may need assistance to evacuate.

SUBDIVISIONS/COMMUNITIES WITH ONE EGRESS POINT

Secondary access is critical should the primary evacuation route be unusable. Subdivisions and communities that lack secondary egress are indicated to show where secondary access should be pursued.

PAVEMENT CONDITIONS

Roadways with low Pavement Condition Index (PCI) may slow evacuating traffic and could specifically be a hinderance on higher classification evacuation routes. Pavement Condition Indexes are shown in Figure 3.

FIRE RISK PRIORITY

Fire risk priority is included as a metric to identify and prioritize roadway improvements. Fire hazard risk analysis was completed using fire behavior GIS modeling and LiDAR remote sensing data capture. Results were field validated. Hazard assessment maps for each community are shown starting on page 41 of this report.

UNUSABLE ROADS

Through public outreach, participants were asked to list any roadways that had become unusable during a previous natural event. While this is not a scientific assessment and does not capture all possible roadways, the list should be further evaluated to determine what risk factors could be reduced.

FLEET MODEL ANALYSIS

High-level evacuation analysis was performed to identify roadways that may have higher capacities and/or higher congestion levels during an evacuation. Fast Local Emergency Evacuation Times Model (FLEET) is an on-line analysis tool available to the public via website in which the user can create various "scenarios" for evacuation and run travel time estimates. The FLEET website describes the program as:

"The Fast Local Emergency Evacuation Times Model (FLEET) simulation provides quick and accurate estimates of evacuation clearance times for user-defined areas anywhere in the United States. FLEET is best used in short notice evacuations such as those for wildfires, flash floods, or human-caused disasters. With FLEET, communities can quickly assess evacuation plans and accurately estimate evacuation clearance times even when trained, dedicated emergency management teams are not available."

Some of the various elements that can be used to test different evacuation scenarios are:

- Evacuation area whether it be town wide or only within certain zones.
- Seasonal factors to adjust population estimates.
- Response times to evacuation and starting hours.
- Destination/endpoint and the percentage of evacuating traffic to each community.
- Roadway modifications such as closed routes and contraflow.

POTENTIAL PINCH POINTS

Potential pinch points on evacuation routes were identified, which are primarily located at interchanges along I-5, or the intersections of major routes in urbanized areas.

IDENTIFIED SHELTERS, ASSEMBLY POINTS, SAFE REFUGE AREAS

Shelters are typically established by the Sherriff's Office or Red Cross for short-term accommodation for evacuated residents. Assembly points are temporary areas for evacuees to gather until conditions subside and evacuation

routes are accessible, or for evacuees who otherwise cannot evacuate the community on their own and need assistance to be moved to a shelter. Assembly points are designated on public transportation routes when possible. These points are often used by residents without a personal vehicle who are transported by public transportation, and transit fees are typically waived. Shelters and assembly points are typically designated at facilities with ample space, parking, and accommodations/services such as schools, parks, and big-box retailers, and are generally located well away from active danger.

A **SAFE REFUGE AREA** is a term for a location where several people (and potentially vehicles and animals) can temporarily assemble / shelter if an evacuation is not possible or safe. Types of areas may include large clearings such as big parking lots, school grounds, parks, wetlands, pastures, big stores, and gyms. It is noted that safe refuge areas may vary depending on the nature of the event.

BRIDGE LOCATIONS

Bridge locations are identified as potential risks, particularly along evacuation routes or along single access point routes. The locations of highway and local bridges are shown in Figure 4.

BIKEWAYS AND TRAILS

One option for improving evacuation routes is to provide a multiuse path that can serve as alternate emergency access during an evacuation event and connect to broader multimodal networks for everyday use. Therefore, it is logical to identify the existing multimodal network (bike paths and trailways) to evaluate opportunities for multiuse path evacuation improvements that could provide connectivity to regional multimodal networks.

OTHER CONSIDERATIONS

Other factors such as distance from I-5, number of structures, and shortest distance to fire perimeter are included to supplement the evaluation or to identify or prioritize improvements.

FIRE RISK ASSESMENT MODELING

The fire behavior modeling utilizes a combination of multiple inputs to calculate where the most vulnerable locations within the County are located and helps determine the most effective areas to focus on fire prevention and planning. The model includes multiple inputs, such as fire response time, development era of buildings, anticipated fire intensity, and current vegetation characteristics. The landscape fire behavior input is an aggregate of other inputs such as fuel types and weather patterns common to red flag fire events. The inputs are discussed in more detail throughout this section.

Each input is given a score on varying scales depending on importance. For example, the higher the housing density, the higher that location scores. Similarly, if there is a history of fire ignitions in a certain area, that location and areas in proximity receive a higher score as well. The inputs are then totaled based on location and a final risk score is given to each location (a 30-meter pixel) throughout the County. It is important to note that there are areas of the County that are non-burnable (see Figure 6) and are therefore excluded from the model. The process of scoring is iterative and stakeholders as well as local experts help determine the appropriate weight of each input to value the final score appropriately. Once reviewed and agreed upon, the entire County is scored from high to low hazard to help determine the most strategic locations for fire planning and prevention. Figure 7 depicts the final iteration of the Tehama County Wildfire Hazard Assessment.

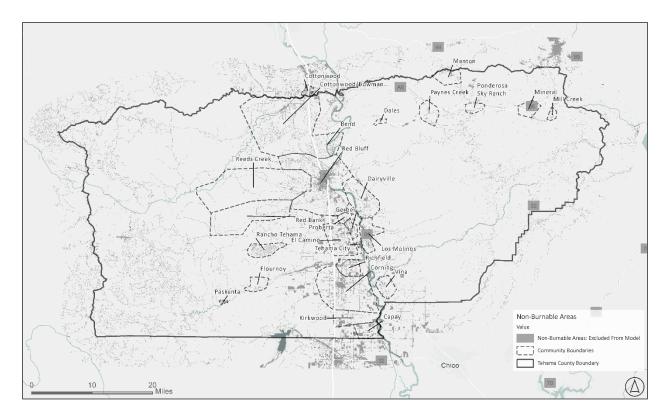


Figure 6 - Non-burnable Areas

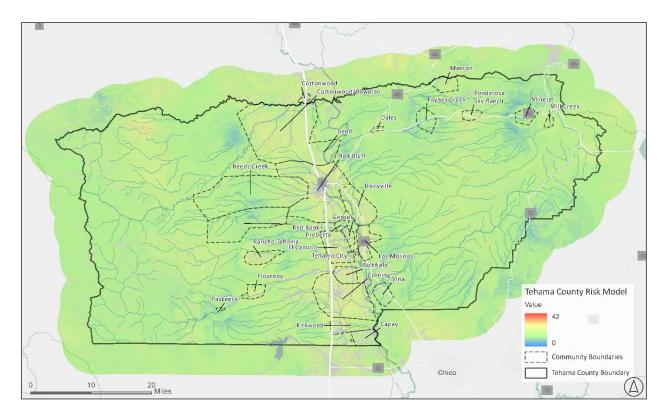


Figure 7 - Overall Wildfire Risk Model Output

LANDSCAPE FIRE BEHAVIOR

The Landscape Fire Behavior layer is a FlamMap output which accounts for elevation, slope, topographic aspect, vegetative fuel model, canopy cover, canopy height, canopy base height, and canopy bulk density. The output used for this layer is "Heat per Unit Area" weighted from 0-10.

Figure 8 depicts the landscape fire behavior in the County. The westernmost and central regions of the County primarily received weighted scores between one (1) and five (5). The eastern foothill region as well as a portion of the western region had a higher proportion of weighted scores in the five (5) to ten (10) range.

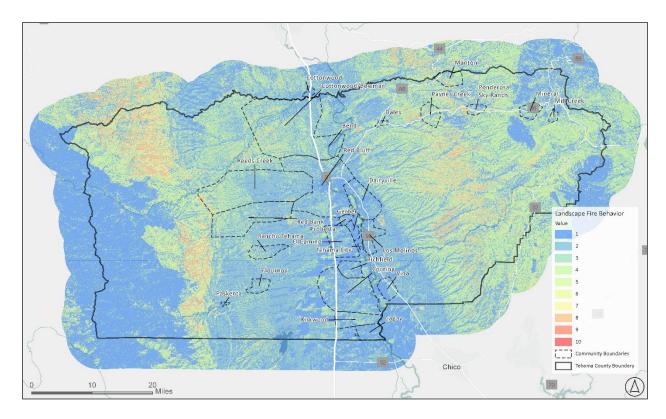


Figure 8 - Landscape Fire Behavior

BUILDING DENSITY

The Building Density layer uses a point density operation on building centroids. The output yields buildings per square mile and is weighted from 0-10.

Figure 9 depicts the building density in the County. There are high densities of buildings in the communities surrounding I-5 such as Red Bluff, Cottonwood/Bowman, and Corning. The building density of Reeds Creek and Red Bank is higher near their eastern boundary but starts to dissipate moving westward. The eastern-most and western-most regions of the County have very little building density except for the existing communities in those regions which have relatively moderate building densities.

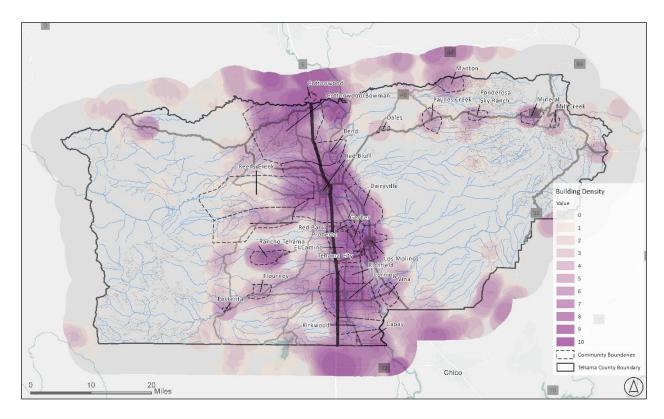


Figure 9 - Building Density

FIRE STATION RESPONSE

The Fire Station Response layer accounts for risk associated with the length of time to respond to a fire. The Fire Station Response layer uses distance from fire stations to score as follows:

- < 0.5 miles = 1
- 0.5-1 miles = 2
- 1-1.5 miles = 3
- 1.5-2 miles = 4
- 2-2.5 miles = 5
- 2.5-3 miles = 6
- 3-4 miles = 7
- 4-6 miles = 8
- 6-8 miles = 9
- >12 miles = 10

Figure 10 depicts the distances from fire stations in the County. Most of the communities in Tehama County lie within three (3) miles of a fire station. However, some portions of communities are farther away; the Reeds Creek, Ponderosa Sky Ranch, and Mill Creek communities lie mostly between three (3) and seven (7) miles away from fire stations.

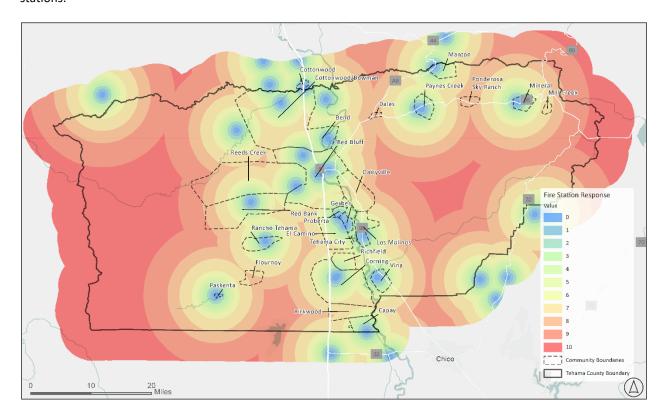


Figure 10 - Fire Station Proximity

VULNERABLE INFRASTRUCTURE

The Vulnerable Infrastructure layer uses the location of schools, nursing homes, hospitals, summer camps, lodges, trailheads, and childcare centers (Department of Homeland Security records). The layer applies a score of five (5) to an area within 0.5 miles of these locations.

Figure 11 depicts vulnerable infrastructure in the County. Most communities in Tehama County have at least one area within 0.5 miles of vulnerable infrastructure; these areas are especially prevalent in Red Bluff and Corning.

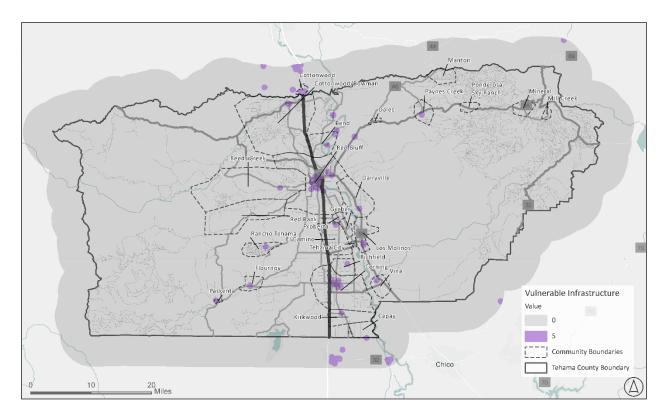


Figure 11 - Vulnerable Infrastructure

IGNITION DENSITY

The Ignition Density layer uses a point density operation on series 100 (fire) incidents recorded by CAL FIRE between 06/01/2021 and 06/01/2023. The output yields ignitions per square mile and is weighted from 0-5.

Figure 12 depicts the ignition density in the County. There are high ignition densities in a few communities including Red Bluff, Corning, as well as El Camino, Gerber, Los Molinos and City of Tehama. Ignition Density is relatively moderate in communities like Rancho Tehama, Cottonwood, Bowman Road and in the areas surrounding the communities with high ignition density. There is little ignition density outside of the aforementioned areas.

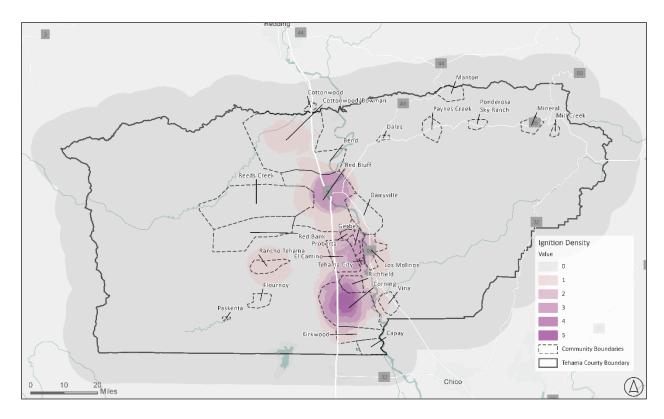


Figure 12 - Ignition Density

KEY TRANSPORTATION ROUTES

The Key Transportation Routes layer classifies roads throughout the County based on their importance during an evacuation, and excludes low traffic, and local roads I-5 was excluded as this route is heavily maintained. Areas within 200 feet of these classified roads were scored as follows:

Local Collectors = 1

Collectors = 2

Arterial = 3

State Highways = 4

Figure 13 depicts the key transportation routes in the County. The majority of communities have routes classified by this model as local collectors and arterials. Routes classified as arterials are present in the western region of the County near I-5, however, they are relatively absent from the eastern region of the County. Routes classified as state highways run from the northwest region to the south-central region as well as from the northeast to the south-east and south-central regions.

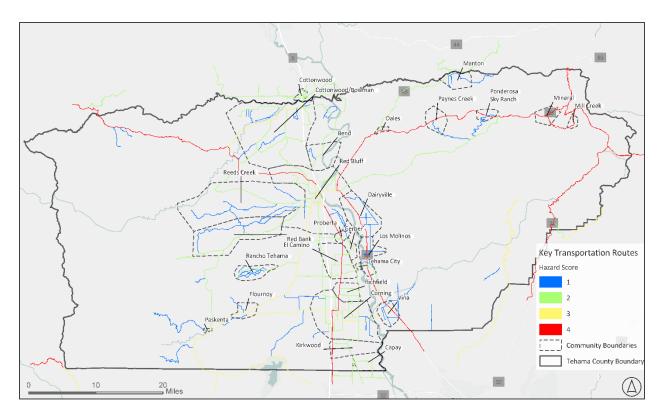


Figure 13 - Key Transportation Routes

KEY ROADSIDE HAZARDS

The Key Roadside Hazards layer uses the roads identified in the Key Transportation Routes layer to score areas within 200ft of roadsides. These areas were intersected with areas that had higher than 10,000KJ/m*2 (heat units) [roughly the upper 1/3rd of all pixels from the Landscape Fire Behavior layer as ranked by heat value].

Figure 14 depicts the key roadside hazards in the County. In the Northeast region, there are roadside hazards prevalent in Manton as well as the southern portion of Paynes Creek. In the Northwest region, there are roadside hazards present in most of the communities; they are especially prevalent in Cottonwood, Bowman Road and the western portions of Reeds Creek and Red Bank. The Southeast region has relatively few areas with roadside hazards, the majority of which are in Bend. In the Southwest region, roadside hazards are extremely prevalent in Rancho Tehama as well as consolidated in two areas west of any community boundary.

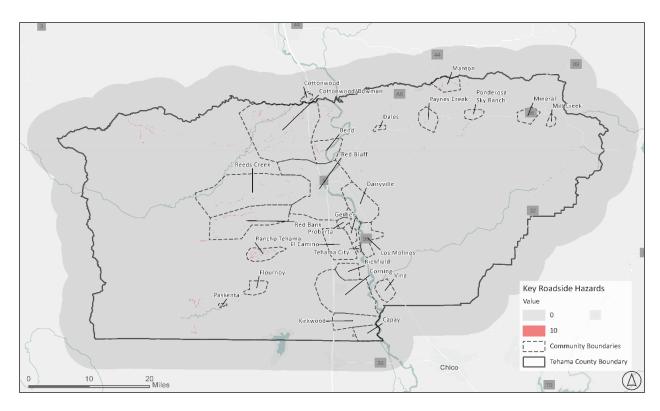


Figure 14 - Overall Roadside Hazards

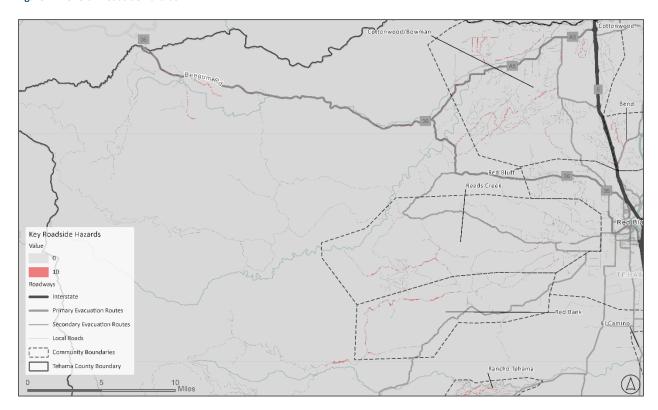


Figure 15 - Roadside Hazards NW Tehama County

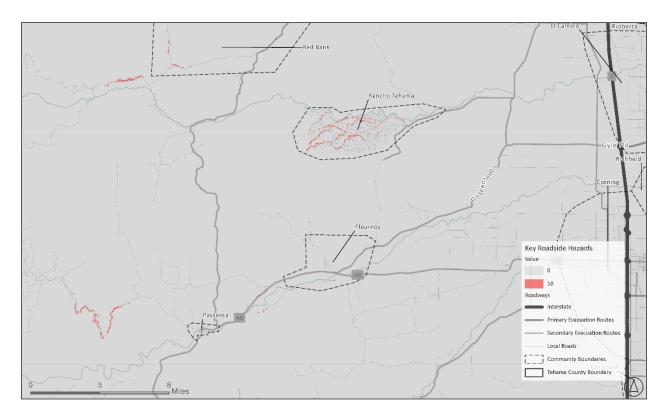


Figure 16 - Roadside Hazards SW Tehama County

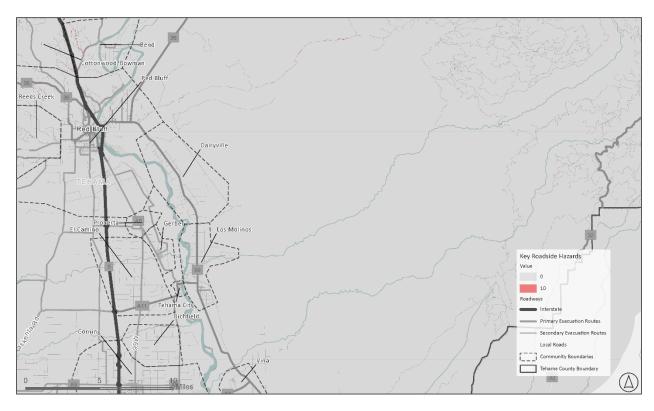


Figure 17 - Roadside Hazards SE Tehama County

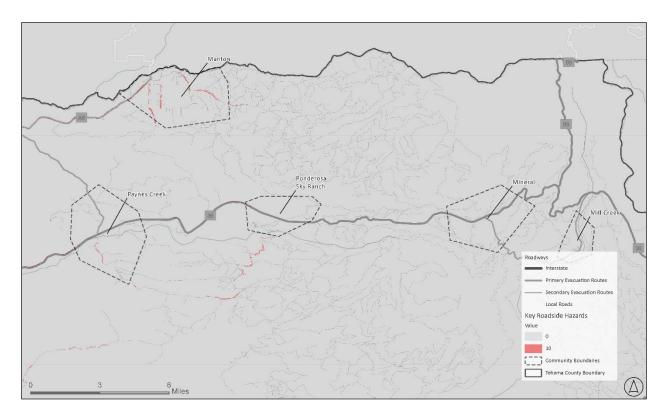


Figure 18 - Roadside Hazards NE Tehama County

5. COMMUNITY AREA PROFILES

5.1 COMMUNITY SELECTION METHODOLOGY

This Study has identified certain communities in Tehama County as priority areas due to their heightened vulnerability to fire, flooding, and earthquake hazards compared to the rest of the County. These "vulnerable communities" are characterized by limited access or egress routes, which may impede swift and efficient evacuations. The selection of these vulnerable communities was informed by a comprehensive geographic analysis detailed in section 3.1 and section 3.2 of this report.

Ensuring multiple safe entry and exit points is crucial in emergencies, both for the evacuation of residents and the timely arrival of emergency personnel. The subsequent community profiles provide a comprehensive overview of these vulnerable areas, including their risk factors, demographics, and exit routes. In response to these vulnerabilities, a series of strategies and solutions, ranging from infrastructure projects to technological communication advancements, have been devised to enhance communication, signage, traffic management, roadway expansion, pavement conditions, and the establishment of ingress and egress routes for evacuations and emergency vehicle access.

The vulnerable community maps and associated project lists serve as a tool to delineate potential opportunities for creating additional egress routes and emergency access pathways for each vulnerable community in the event of an emergency evacuation. In cases where secondary access paths must be established on land not owned by the County, meticulous coordination with landowners is imperative. This collaborative effort may involve agencies such as CAL FIRE, CAL OES, the United States Forest Service (USFS), Caltrans, community members, and private landowners. It is important to note that the secondary access route recommendations listed below are for review, and their implementation has yet to be determined. These secondary access projects will necessitate further coordination and feasibility studies to assess their practicality and suitability for enhancing these potential improvements.

For the Study's recommended priority project list, please see Section 6, which details a series of prioritized projects identified through comprehensive analysis, including policy findings, roadway network and access evaluations, community input, best practices from similar geographic areas, and modeling analyses. These projects are sorted by community and include a variety of interventions aimed at enhancing evacuation safety and infrastructure resilience. Here are key highlights from the project list in Section 6:

- Countywide Emergency Siren System: A short-term project with a \$2,000,000 budget aims to install solar-powered sirens across Tehama County to alert residents, especially those without internet access, about evacuations and emergencies.
- Countywide Emergency Evacuation Wayfinding and Routing System: This short-term project involves
 placing reflective evacuation signs to direct residents to nearest roads and alternate routes during
 emergencies, with a budget of \$250,000.
- **Genasys Countywide Notification System**: A rollout of the Genasys Protect notification framework to inform the community about evacuation procedures and resources through various mediums.
- Lake California Secondary Emergency Access Fire Lane Access: Identified as needing an additional secondary access route for emergency evacuations, this long-term project focuses on Lake California, with cost estimates pending further evaluation.

- Manton and Mineral Area Projects: Include roadside thinning and mastication, roadway and intersection
 improvements, with specific projects like the Wilson Hill Roadside Thinning in Manton and State Route
 36/Battle Creek Road Safety Access Project in Mineral, highlighting the focus on maintaining and
 improving evacuation routes.
- Evergreen Road Widening Project: This medium-term roadway improvement project in Cottonwood aims to widen Evergreen Road and expand clear zones to support both evacuees and emergency vehicles, with a cost estimate of \$500,000.
- Luce Griswold Road Paving: Also in Cottonwood, this medium-term project intends to pave Luce Griswold Road, the only secondary access road currently unpaved, with an estimated cost of \$80,000.
- **Bowman Road Right of Way Thin**: Multiple short-term projects on Bowman Road involve thinning in the right of way as directed by a forester to target gray pine and ladder fuels while pruning larger oaks.

Each project is categorized by type, timeframe, community, estimated cost, location, and a brief description of the intervention. Prioritized projects represent a strategic approach to enhancing Tehama County's evacuation readiness and infrastructure resilience, reflecting a blend of short-term, medium-term, and long-term initiatives across different communities within the county. The comprehensive list underscores the commitment to improving safety and accessibility for all residents, particularly in response to the risk of natural disasters such as wildfires.

5.2 HAZARD MAPS AND CHARACTERISTICS

WILDFIRE HAZARD MODELING RESULTS

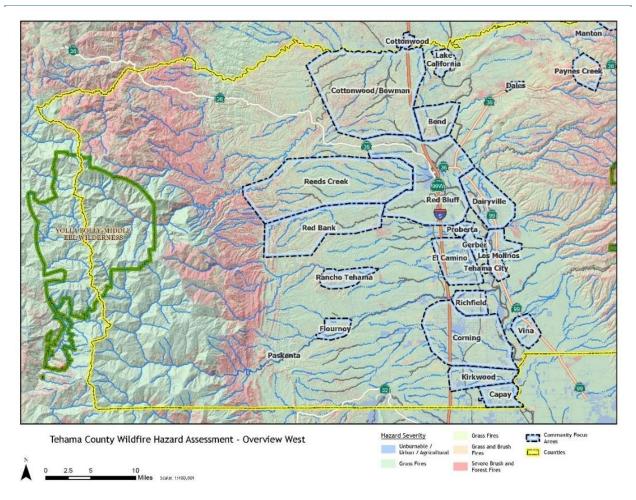


Figure 19 - Tehama County Community Areas (WEST)

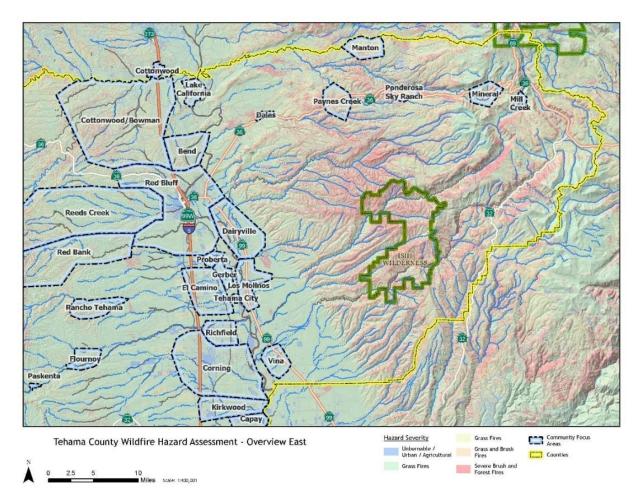


Figure 20 - Tehama County Community Areas (EAST)

FLOOD HAZARDS

Flood risk in Tehama County presents a significant hazard due to the region's topography and climate. The County has a history of flooding, leading to costly damage and challenging emergency management. Despite ongoing efforts to reduce flood risk, the reality remains that flooding is a potential threat. Key points about flooding hazards in Tehama County include:

- Floodplain Management Floodplains in Tehama County are designated based on flood frequency and the extent of coverage. Dams, levees, channels, and other protective structures are in place to provide some level of flood protection, but there is always a residual risk of flooding.
- Precautions and Emergency Response Residents are advised to take several precautionary steps during flood warnings, including turning off utilities, moving valuables to higher floors, and stocking cars with emergency supplies. In case of imminent flooding, it's important to avoid flooded roads and refrain from attempting to walk through floodwaters.
- Post-Flood Recovery After a flood, checking for structural damage before entering buildings, avoiding
 the use of open flames, watching for downed electrical wires, and initiating clean-up measures are crucial
 steps.
- Long History of Flooding The region has experienced numerous state and federally declared flood
 disasters, underscoring the ongoing threat of flooding. Even in drought conditions, sudden rains can lead
 to flooding due to parched soil and inadequate drainage systems.
- Risk Awareness and Mitigation Residents are encouraged to be aware of their flood risks and take
 proactive steps to mitigate potential damage. This includes understanding floodplain dynamics, complying
 with local building and safety regulations, and preparing for emergencies through planning and
 maintaining necessary supplies.

Overall, flood risk management in Tehama County involves a combination of structural measures, community planning, individual preparedness, and effective response and recovery strategies. The following maps show flood risk and dam breach inundation data provided by the California Department of Water Resources.

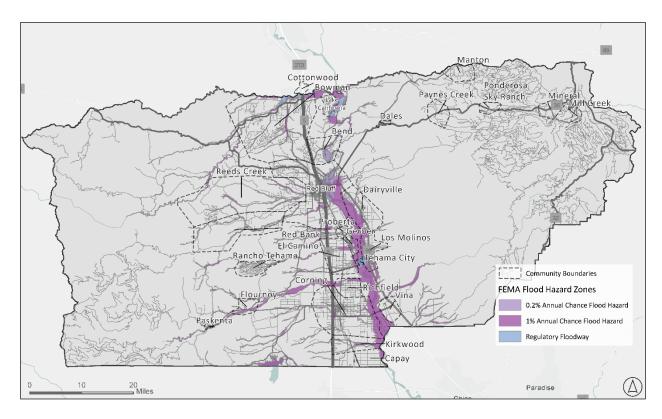


Figure 21 - 100- and 500-year flood plain model for Tehama County

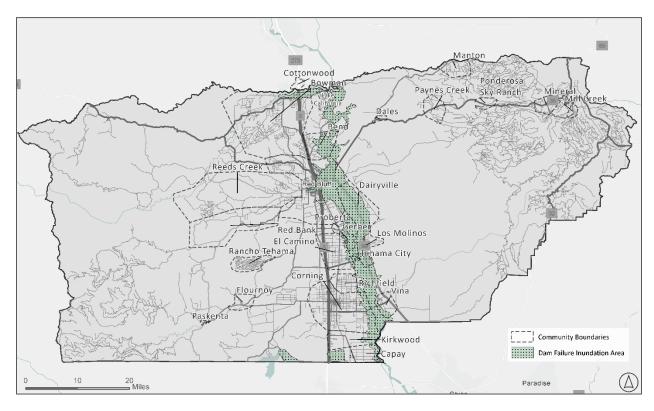


Figure 22 - Dam Failure Inundation Area

HAZARDOUS MATERIALS ANALYSIS

Prioritizing community safety and well-being concerning the risks posed by hazardous materials is key to the County's evacuation planning. Focusing on the areas along railways and I-5, strategic evacuation planning aims to mitigate potential hazards effectively and safeguard residents and the environment through a multi-faceted approach:

- Risk Assessment In-depth assessments and GIS mapping identify hazardous material risks near railways and I-5.
- Emergency Response A comprehensive emergency plan, in collaboration with local emergency services, addresses hazardous materials incidents.
- Community Engagement Awareness programs and drills educate the public about hazardous materials safety and emergency response procedures.
- Transportation Safety Collaboration Partnerships with transport agencies ensure adherence to safe transportation practices and regular safety audits for hazardous materials.
- Infrastructure and Technology Investment Enhancing transport infrastructure and deploying advanced monitoring systems for hazardous material transport.
- Local Capacity Building Training for first responders and development or reinforcement of local hazardous materials response teams.
- Continuous Strategy Review Regular updates to risk assessments, emergency plans, and response strategies, reflecting new data and technological progress.
- Policy and Legislation Advocacy Advocating for strict legislation to improve hazardous material transport safety.

These strategies represent a commitment to proactive risk management, ensuring the protection of the community, infrastructure, and natural environment from the challenges associated with hazardous material transportation. The following maps show areas of hazardous material risk using a standard 0.5 mile buffer:

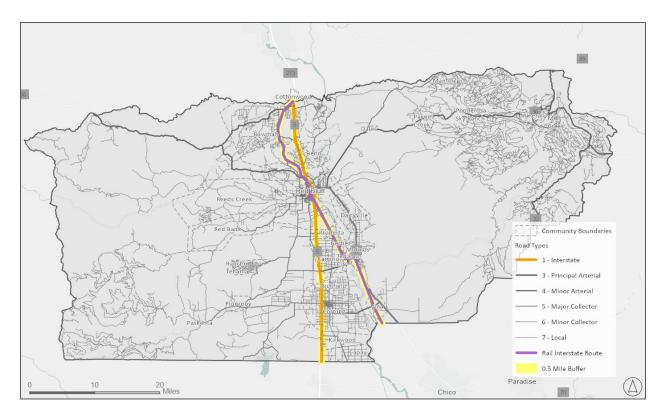


Figure 23 - Hazardous Materials Risk Zones

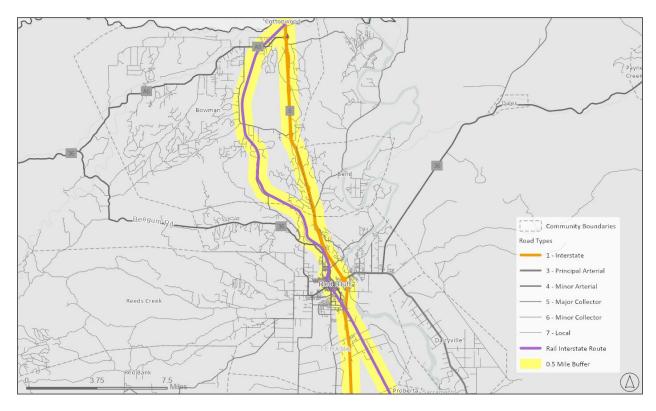


Figure 24 - Hazardous Materials Risk Zone (north)

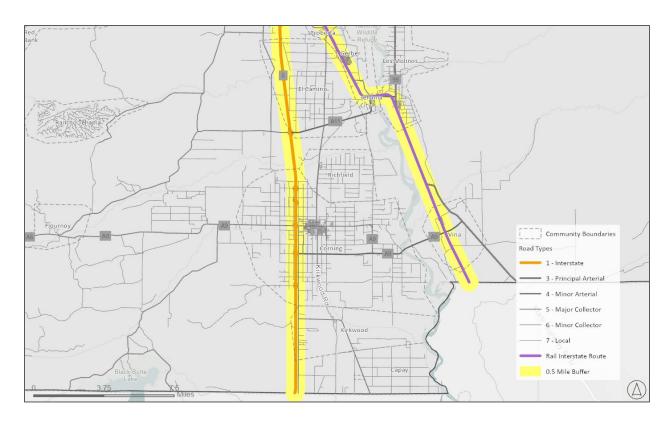


Figure 25 - Hazardous Materials Risk Zone (south)

EL CAMINO

El Camino is a small agricultural community located approximately four (4) miles east of I-5 and four (4) miles west of the Sacramento River. El Camino is in a Low Fire Hazard Severity Zone and has five (5) ingress-egress points. El Camino is served by Tehama County Fire Station 9. The area primarily consists of Oak Woodland vegetation. The evacuation area for El Camino is 21.45 square miles. The population of El Camino is 1,649 people with roughly 601 households. The average household size is 2.74 and the median age in the town is 40.4. The average household income is \$46,135 and the average price of a home is \$408,681. Most people in the community commute approximately 15-19 minutes to work. 2.6% of people carpool to work, 1.9% walk, 0.5% take public transit and little to no people bike.

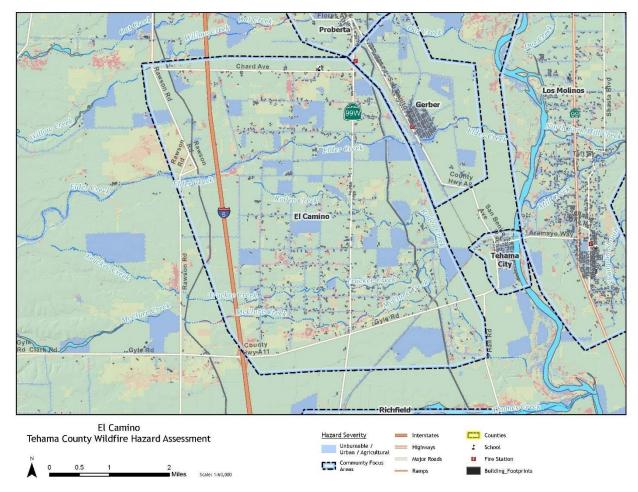


Figure 26 - El Camino Wildfire Hazard Assessment

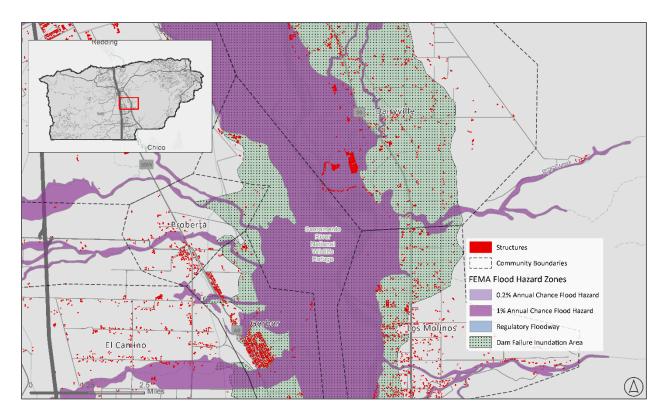


Figure 27 - El Camino Flood Hazard Assessment

DAIRYVILLE

Dairyville is a rural community located roughly one (1) mile east of the Sacramento River, southeast of Red Bluff and north of Los Molinos. The community is bisected by SR-99 and is seven (7) miles east of I-5. Dairyville is in a Low Fire Hazard Severity Zone and has three (3) ingress-egress points. The area primarily consists of Oak Woodland vegetation. Dairyville experienced the Antelope Creek Fire in 2008. The evacuation area for Dairyville is 24.32 square miles. The population of Dairyville is 1,541 people with roughly 631 households. The average household size is 2.44 and the median age in the town is 47.0. The average household income is \$61,962 and the average price of a home is \$343,707. Most people in the community commute approximately 15-19 minutes to work. 15% of people carpool to work, 0% walk, 1.6% take public transit and 81.5% of people drive alone.

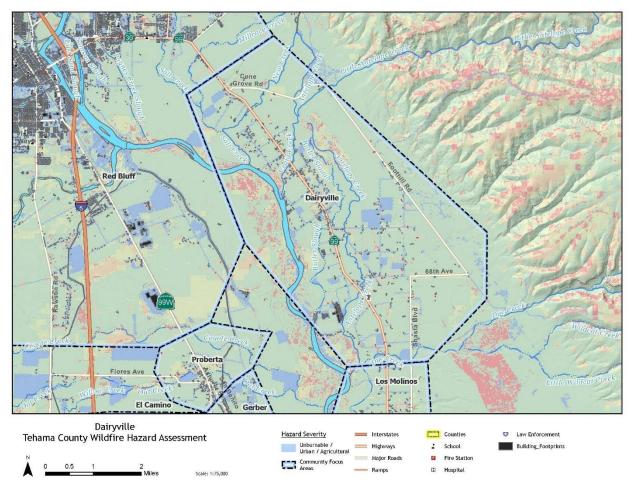


Figure 28 - Dairyville Wildfire Hazard Assessment

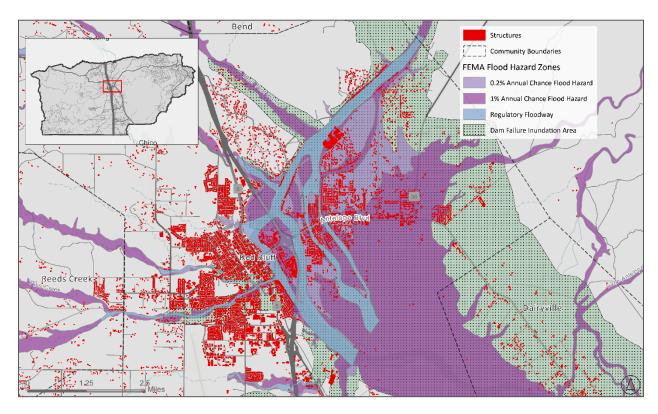


Figure 29 - Dairyville Flood Hazard Assessment (north)

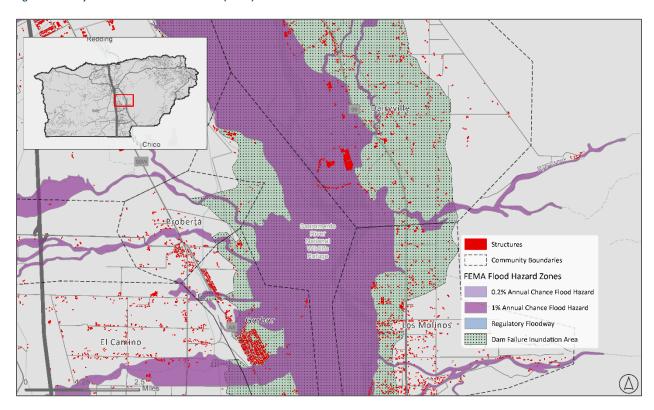


Figure 30 - Dairyville Flood Hazard Assessment (south)

GERBER

Gerber is a small town that sits on the north bank of Elder Creek, approximately two (2) miles west of the Sacramento River, encompassing the Las Flores community. The community is located between I-5 and SR 99. The main road is San Benito Avenue which provides a connection to the City of Tehama, Los Molinos and the I-5, which is approximately five (5) miles west. Gerber is surrounded by agricultural land and has the possibility of flooding due to its proximity to the Sacramento River. Gerber is in a Low Fire Hazard Severity Zone and has three (3) ingress-egress points. The evacuation area for Gerber is 2.37 square miles. The population of Gerber is 1,271 with roughly 435 households. The average household size is 2.92 and the median age in the town is 35.3. The average household income is \$52,441 and the average price of a home is \$211,875. Most people in the community commute approximately 20-24 minutes to work. 25.7% of people carpool to work, 3% walk to work and little to no people bike or take public transit.

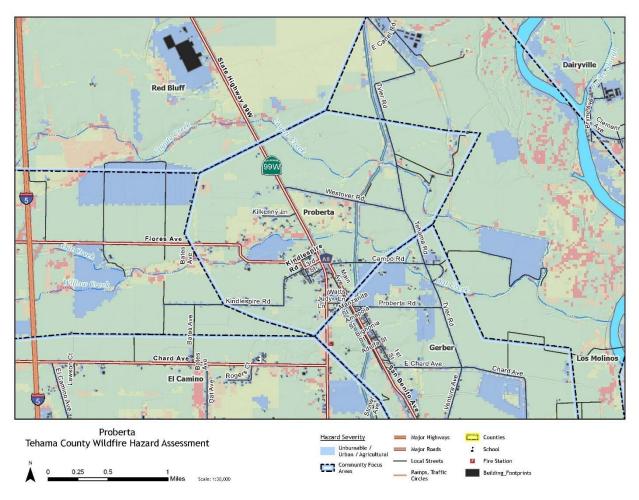


Figure 31 - Gerber Wildfire Hazard Assessment

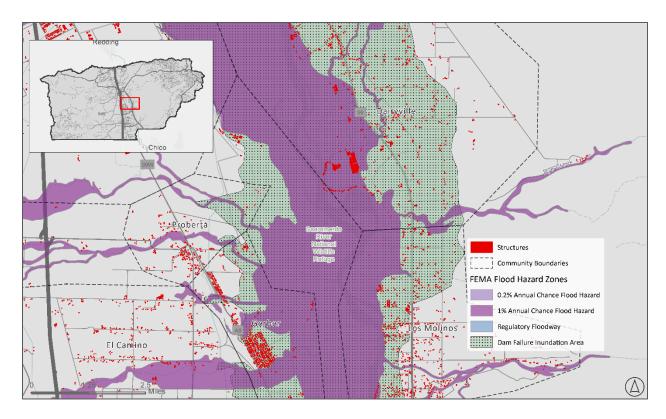


Figure 32 - Gerber Flood Hazard Assessment

LOS MOLINOS

Los Molinos is located east of the Sacramento River and on the southwest foothills of the Lassen National Forest. The community is bisected by SR-99 and is approximately seven (7) miles from I-5. Mill Creek also flows through the community, forming a confluence to the Sacramento River. Los Molinos primarily consists of and is surrounded by large agricultural lots. The zoning in Los Molinos consists of mixed-use residential and agricultural land. Los Molinos is in a Low Fire Hazard Severity Zone and has three (3) ingress-egress points. The evacuation area for this area is 12.75 square miles. Aramayo Way in Los Molinos provides the City of Tehama with a vital connection to SR-99. Los Molinos is served by Tehama County Fire Station 10.

According to the United States Census, Los Molinos has a total population of 3,292 people with 1,322 housing units. The median age of Los Molinos residents is 45.8 and an average household size of 2.48. The average household income is \$57,699 and the average price of a home is \$274,879. Most people in the community commute approximately 20-24 minutes to work. 16.9% of people carpool to work, 0% of people bike, 2.1% walk, and 0.8% take public transit.

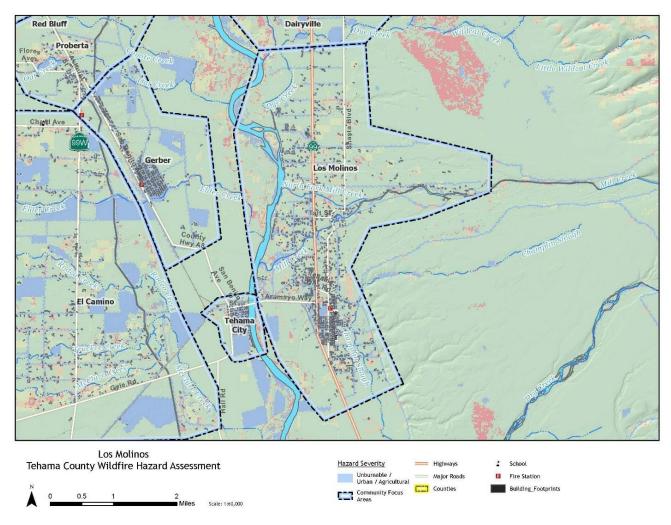


Figure 33 - Los Molinos Wildfire Hazard Assessment

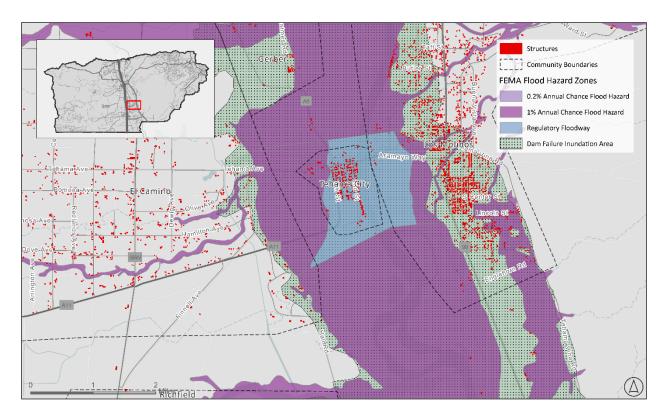


Figure 34 - Los Molinos Flood Hazard Assessment

PROBERTA

Proberta is southeast of Red Bluff and north of Corning, located between I-5 and SR 99. The community primarily consists of large agricultural areas with a dense housing area at the core and sparsely dispersed homes in the surrounding area. Proberta is located west of the Sacramento River and approximately two (2) miles east of I-5. The Town of Proberta is in a Low Fire Hazard Severity Zone and has four (4) ingress-egress points. The evacuation area for Proberta is 2.85 square miles. The population of Proberta is 80 people with approximately 30 households. The average household size is 2.67 and the median age is 42.2 years old. The average household income is \$67,177 and the average price of a home is \$383,333. Most people in the community commute approximately 20-24 minutes to work. 34.6 % drive alone to work, little to no people carpool, bike, walk or take public transit.

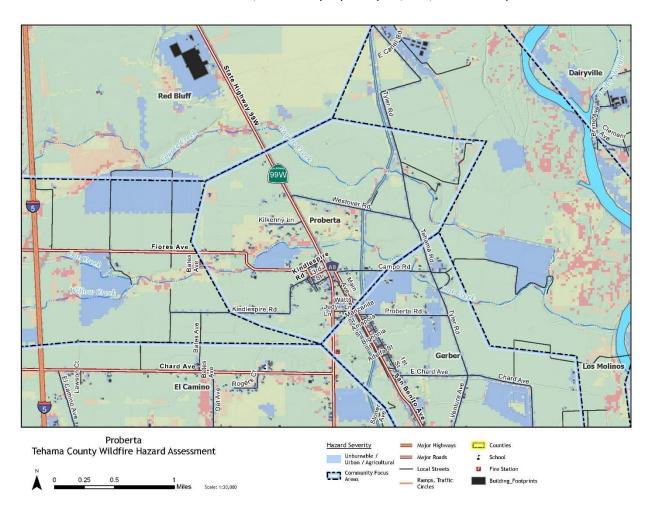


Figure 35 - Proberta Wildfire Hazard Assessment

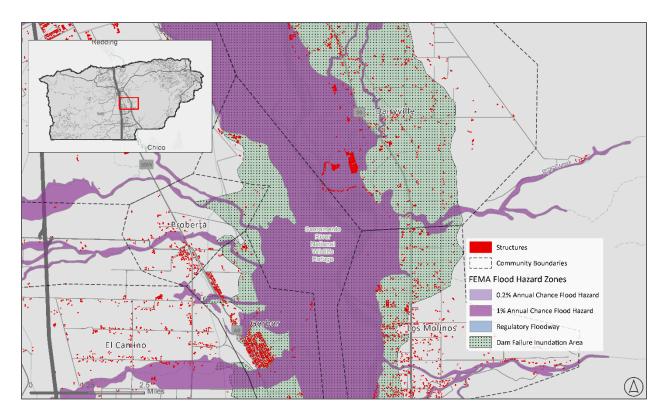


Figure 36 - Proberta Flood Hazard Assessment

CITY OF TEHAMA

The City of Tehama is a small town located west of the Sacramento River and Los Molinos. Many houses here are pile dwellings, which are homes required to be raised on stilts to avoid flood damage. Flooding is a primary concern, however, due to building requirements and mitigation measures, this area is more resilient than most. The City of Tehama is in a Low Fire Hazard Severity Zone. The main street in Tehama is C Street and it serves as a connector street to SR-99 and I-5. The evacuation area for the City of Tehama is 0.75 square miles. The population is 402 people with around 168 households. The average household size is 2.39 and the median age in the town is 42.7 years old. The average household income is \$45,057 and the average price of a home is \$360,000. Generally, people in the community commute approximately 10-14 minutes to work, 8.7% carpool to work, 3.9% take public transit, 1% walk, and 0% of people bike.

Key evacuation route considerations for the City of Tehama:

- Proximity to I-5
- Medium number of access points per population
- Medium number of structures
- Low fire risk
- C Street was identified in the evacuation modeling as potentially having congestion in an evacuation
- Tehama Avenue was identified in public outreach as a road that had previously been unusable due to a natural event.
- C Street / 5th Avenue was identified as a potential pinch point where evacuation routes converge

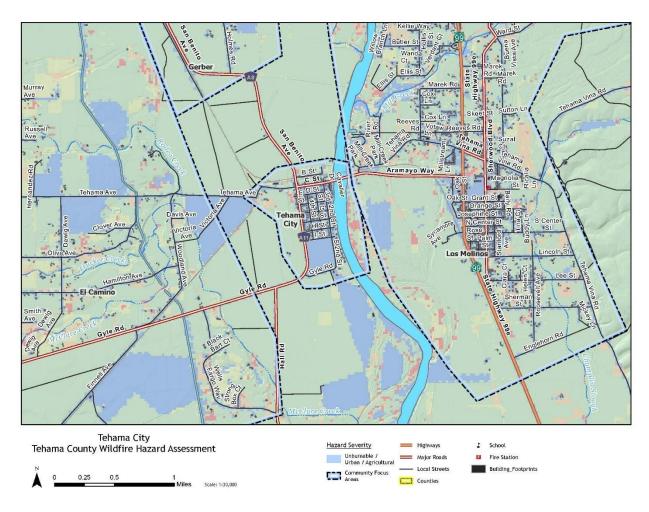


Figure 37 -City of Tehama Wildfire Hazard Assessment

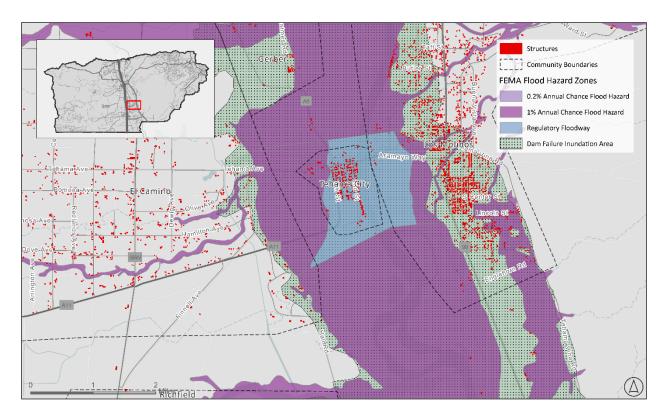


Figure 38 - City of Tehama Flood Hazard Assessment

CAPAY

Capay is a small rural agricultural community that is bisected by the County boundary line of Glenn and Tehama County. The community is located west of the Sacramento River, approximately eight (8) miles east of I-5 and north of SR-32. Homes and businesses are dispersed in this area with many agricultural fields scattered throughout. Capay is in a Low Fire Hazard Severity Zone and has four (4) ingress-egress points. The evacuation area for Capay is 11 square miles. The population of Capay is 482 people with roughly 382 households. The average household size is 2.32 and the median age in the town is 41.3. The average household income is \$83,344 and the average price of a home is \$400,000. Most people in the community commute approximately 30-34 minutes to work. 5.7% of people carpool to work, 2.1% walk and little to no people bike or take public transit.

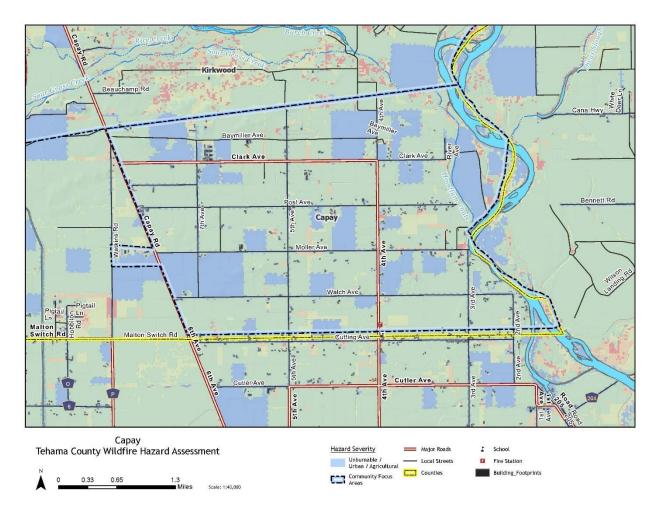


Figure 39 - Capay Wildfire Hazard Assessment

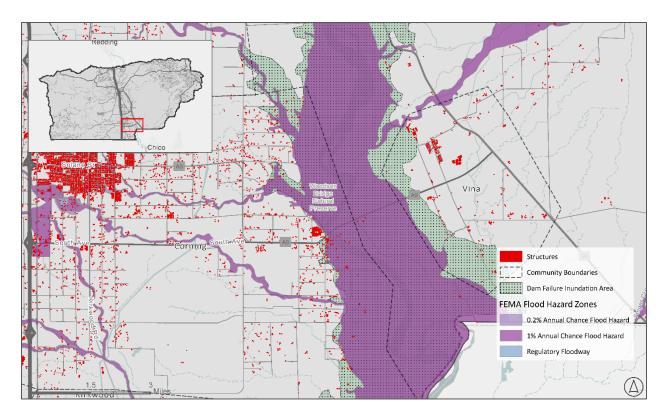


Figure 40 - Kirkwood Flood Hazard Assessment

CORNING

The City of Corning is bisected by I-5 and west of the Sacramento River. There is an I-5 entrance and exit ramp directly in Corning that provide access to Solano Street and Corning Road. Corning primarily consists of agricultural fields that produce olives, plums, walnuts, and almonds. The City also contains the Paskenta Tribe of Nomlaki Indians Rancheria. Corning is in a Low Fire Hazard Severity Zone and has four (4) ingress-egress points. Corning had a small fire in 2007. The evacuation area for Corning is 54.97 square miles. The population of Corning is 13,447 people with around 4,712 households. The average household size is 2.85 and the median age in the town is 33.8 years old. Corning is one of the more populous locations in Tehama County. The average household income is \$58,379 and the average price of a home is \$273,940. Most people in the community commute approximately 5-9 minutes to work. 13.3% of people carpool to work, 1.3% walk, 0.8% take public transit and little to no people bike.

Key evacuation route considerations for Corning:

- High number of residents and number of access points per population
- High number of structures
- Low Fire Hazard Priority
- Several roadways identified in Fleet as potential pinch points in an evacuation (Solano Street and South Avenue)
- Potential Pinch Points
- Corning Road / West Side Highway
- Corning Road / Houghton Avenue
- E Solano Street / Kirkwood Road

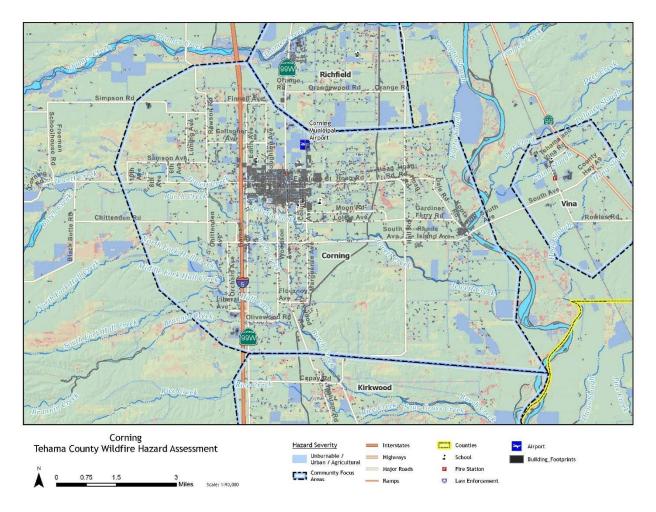


Figure 41 - Corning Wildfire Hazard Assessment

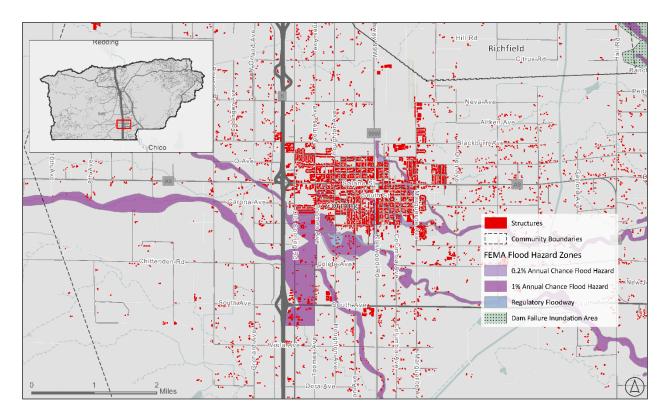


Figure 42 - Corning Flood Hazard Assessment

RICHFIELD

Richfield is a small community located alongside SR-99. It is about five (5) miles away from I-5 and has two (2) ingress-egress points. It is located on the southern bank of Thomes Creek, which is a confluence of the Sacramento River. The area surrounding Richfield is primarily agricultural fields. There is a risk of flooding due to its proximity to the Sacramento River and Thomes Creek. Richfield is in a Low Fire Hazard Severity Zone. The evacuation area for Richfield is 9.7 square miles. The population of Richfield is 916 people with around 321 households. The average household size is 2.85 and the median age in the town is 39.5 years old. The average household income is \$79,264 and the average price of a home is \$314,286. Most people in the community commute approximately 30-34 minutes to work. 9.8% of people carpool to work, 1.1% of people walk, and little to no people bike or take public transit.

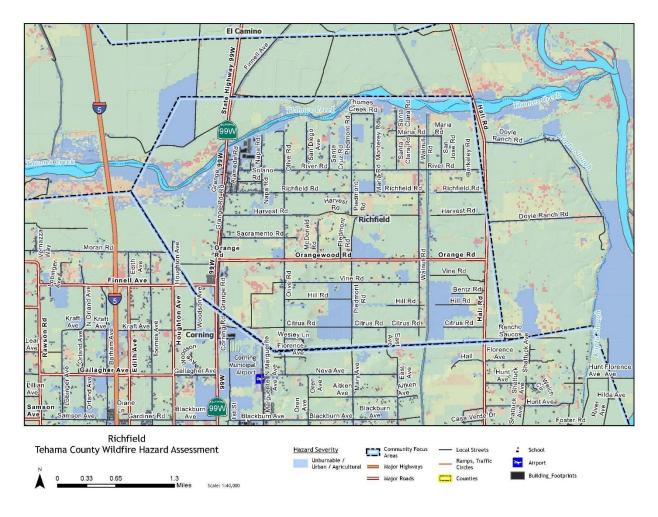


Figure 43 - Richfield Wildfire Hazard Assessment

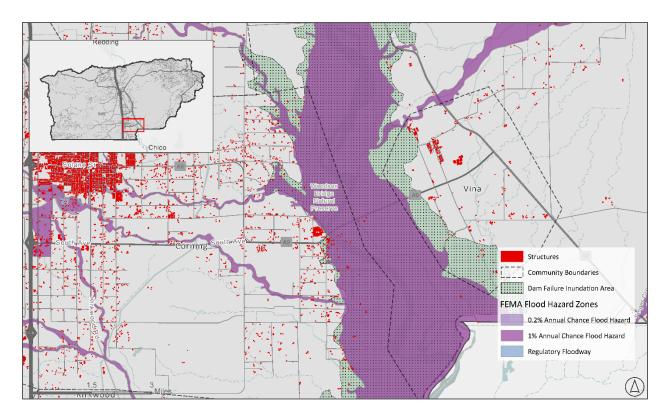


Figure 44 - Richfield Flood Hazard Assessment

VINA

Vina is a small community located in Tehama County, south of Red Bluff. Vina lies to the east of the Sacramento River, with SR-99 to the west, and it is located approximately eight miles from the I-5 freeway. This region is predominantly characterized by dense agricultural activities, encompassing extensive fields and vineyards. Although Vina is not immediately adjacent to major water bodies, it is situated in the vicinity of the Sacramento River, which has experienced localized flooding because of heavy rainfall and storm events in the past. Vina is also a low-lying flat area that has flooded and is likely to flood in the future. Such flooding incidents may necessitate evacuations to safeguard the well-being of residents.

In terms of fire risk assessment, Vina is designated as being in a Low Fire Hazard Severity Zone. The community has three accessible ingress and egress points, contributing to enhanced mobility and safety. Additionally, Vina is near the CAL FIRE Vina Helitack Base, which is located on SR-99. The presence of Tehama County Fire Station 16 in proximity augments firefighting capabilities. The Nature Fire incident in 2003 serves as a reminder of the importance of preparedness in the face of potential fire hazards.

The demarcated evacuation area for Vina spans 8.38 square miles. The community's population comprises approximately 311 individuals, distributed across roughly 106 households. The average household size is 2.86, and the median age within the community stands at 45.1 years. The average household income is reported as \$80,261, with the typical home price averaging \$436,667. As for commuting patterns, most residents report an average travel time of 20-24 minutes to reach their workplaces. Carpooling is a prevalent mode of commuting, with 28.6% of residents choosing this option, while 8.7% opt to walk. Biking and public transit are relatively less utilized for commuting purposes.

Vina strategically aligns along SR-99, offering multiple points of access and relatively lower fire risk. Nonetheless, the potential for flooding due to the proximity of the Sacramento River remains a significant consideration, particularly considering the increasing frequency of extreme flooding events linked to climate change. A commitment to preparedness, awareness of evacuation plans, and effective communication with local authorities is integral to ensuring the safety and well-being of Vina's residents.

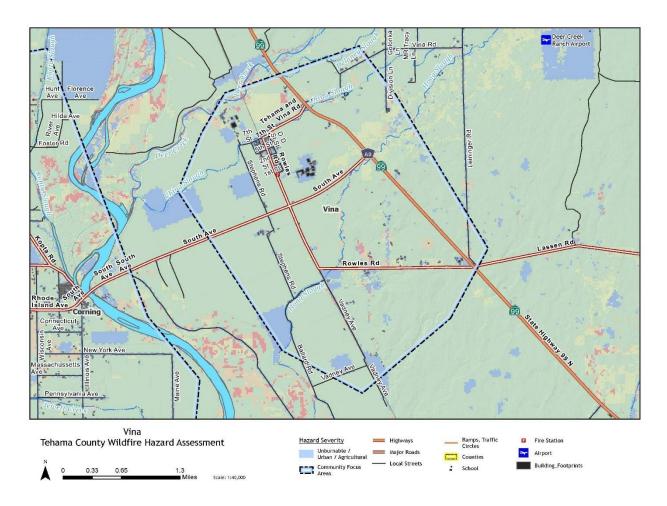


Figure 45 - Vina Wildfire Hazard Assessment

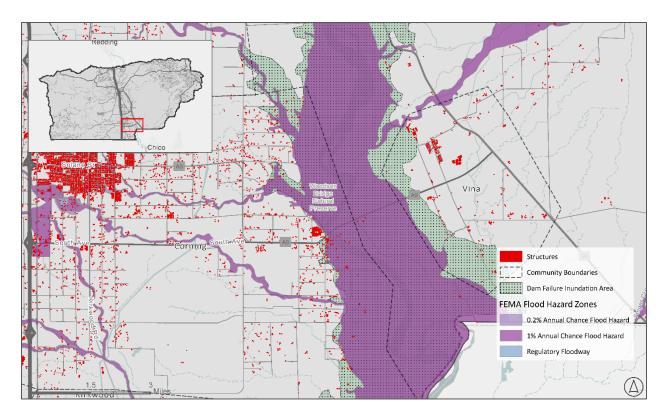


Figure 46 - Vina Flood Hazard Assessment

KIRKWOOD

Kirkwood is a small town south of Corning and east of I-5. The main roads in Kirkwood are Kirkwood Road, Capay Road, and Inghram Road. Kirkwood is primarily an agricultural town with sparsely dispersed rural homes. Kirkwood is in a Low Fire Hazard Severity Zone and has four (4) ingress-egress points. In 2007, Kirkwood experienced the Conner Fire. The evacuation area for Kirkwood is 16.05 square miles. The population of Kirkwood is 407 people with around 128 households. The average household size is 3.18 and the median age in the town is 39.5. The average household income is \$61,129 and the average price of a home is \$425,862. Most people in the community drive around 30-34 minutes to work. 3.9% of people carpool to work, 1% walk and little to no people bike or take public transit.

This community is located between I-5 and SR 99. In general, communities in this area have low populations, low fire risk, and multiple access points.

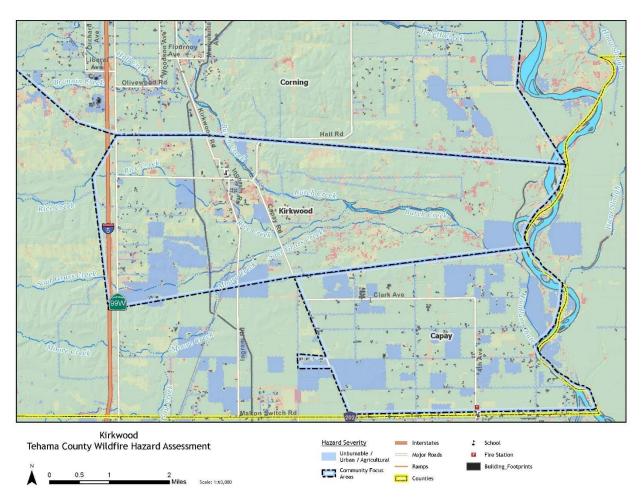


Figure 47 - Kirkwood Wildfire Hazard Assessment

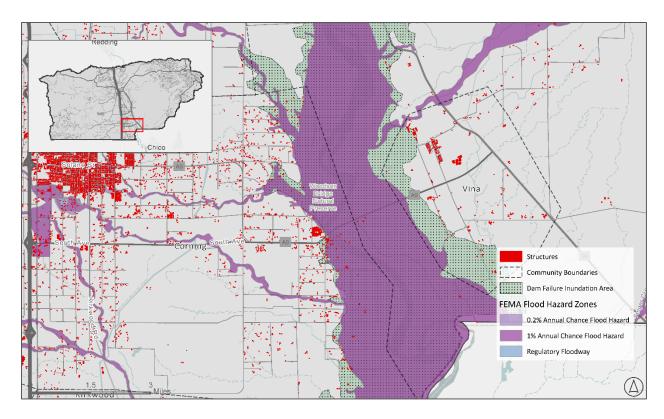


Figure 48 - Kirkwood Flood Hazard Assessment

FLOURNOY

The town of Flournoy is west of the City of Corning and is approximately 17 miles west of I-5. The town is bisected by Thomes Creek and is primarily served by Corning Road and Paskenta Road. Flournoy is in the foothills of the Mendocino National Forest and is primarily an Oak Woodland Forest. Flournoy is a High Fire Hazard Severity Zone and has three (3) ingress-egress points. This area experienced the Paskenta Fire in 2016. The evacuation area for Flournoy is 6.73 square miles. The population of Flournoy is 125 people with around 49 households. The average household size is 2.14 and the median age in the town is 47.5. The average household income is \$38,628 and the average price of a home is \$325,000. Most people in the community commute approximately 15-19 minutes to work. 4.0% of people carpool to work, 4.0% walk to work and little to no people bike or take public transit.

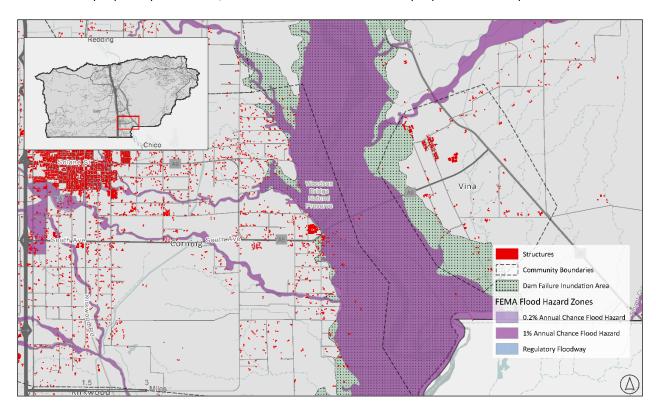


Figure 49 - Flournoy Flood Hazard Assessment

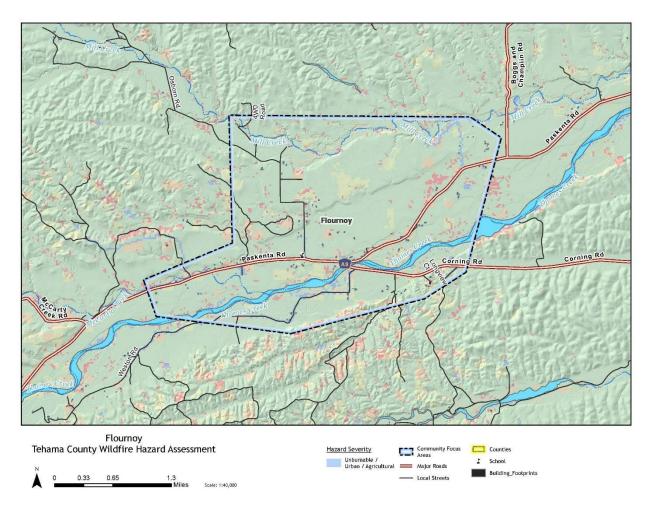


Figure 50 - Flournoy Wildfire Hazard Assessment

PASKENTA

The town of Paskenta is bisected by Thomes and Digger Creeks and is primarily served by SR-55 and SR-122. Paskenta is 19 miles away from I-5 and is in the foothills of the Mendocino National Forest. The town contains the CAL FIRE Paskenta Station, and the Paskenta Station of the Mendocino National Forest. Paskenta is in a High Fire Hazard Severity Zone and has four (4) ingress-egress points. Historically, Paskenta experienced the Whiskey Fire in 2008 and the Paskenta Fire in 2016. The evacuation area for Paskenta is 0.59 square miles. The population of Paskenta is 97 people with approximately 36 households. The average household size is 2.28 and the median age is 47.5 years old. The average household income is \$38,857 and the average price of a home is \$375,000. Most people in the community commute approximately 30-34 minutes to work. 5.3% of people carpool to work and little to no people bike, walk or take public transit.

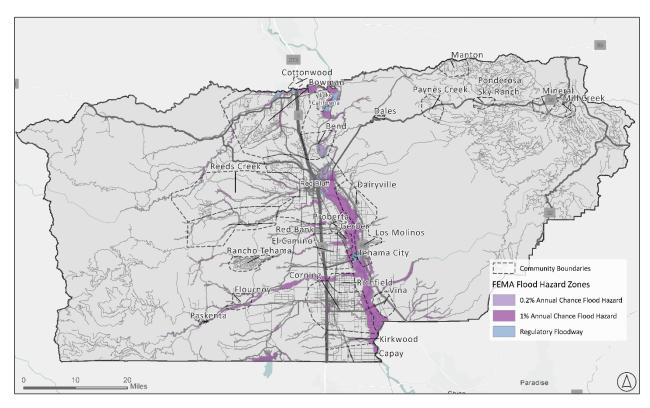


Figure 51 - Paskenta Flood Hazard Assessment

RANCHO TEHAMA

Rancho Tehama is a private, unincorporated rural community approximately 16 miles west of I-5 and southwest of Red Bluff. Rancho Tehama is north of Black Butte Recreation Area, east of the Mendocino National Forest and west of the Sacramento River. Rancho Tehama consists of seasonal Elder Creek, Oak and Pine tree vegetation. It is a private subdivision with views of Mt. Shasta, Lassen and diverse wildlife. It contains an airstrip that can serve as a potential area for emergency personnel staging. Rancho Tehama also consists of both recreational and commercial areas. The community consists of sparsely dispersed homes and some residents utilize the land to farm crops such as olives, walnuts or almonds.

Rancho Tehama is in a Very High Fire Hazard Severity Zone. Rancho Tehama experienced the Rancho Fire in 2022. There are only two (2) ingress-egress points in this community, making it a highest-priority. The main ingress-egress points are Rancho Tehama Road and Oak Ridge Road, with Stagecoach Road serving as a supplemental ingress-egress point. The community has an existing evacuation plan that outlines three (3) safety zones (Figure 33). Evacuation during fires is crucial to this area to ensure the safety of residents. The evacuation area for Rancho Tehama is 10.35 square miles.

On the north end of Rancho Tehama, there is an access area to Pebble Beach Creek. Tehama Rural Area Express (TRAX) serves the area as well as the Tehama County Fire Station 13 which may serve as an important resource in the event for evacuation. The population of Rancho Tehama is 1,555 people with around 626 households. The average household size is 2.48 and the median age in the town is 51.2 years old. The average household income is \$38,497 and the average price of a home is \$315,517. Most people in the community commute approximately 30-34 minutes to work. 11.2% of people carpool to work and little to no people bike, walk or take public transit.

Key evacuation route considerations for Rancho Tehama:

- Very high population for only one access point
- Possible secondary access (Boggs and Champlain Road) both of which have low PCI
- Identified safe refuge areas
- Medium distance to I-5
- High number of structures and fire risk

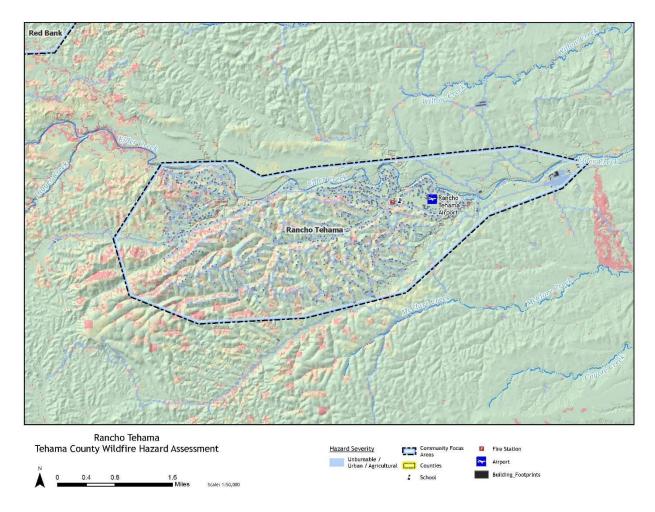


Figure 52 - Rancho Tehama Wildfire Hazard Assessment

RED BANK

Red Bank is in the foothills of the Mendocino National Forest. This area primarily consists of Oak Woodland vegetation with housing dispersed throughout the evacuation area. Red bank is in a Very High Fire Hazard Severity Zone and is 15 miles away from I-5. There are only three (3) ingress-egress points in this community making it one of Tehama's highest-priority evacuation sites to improve. Evacuation during fires is crucial to this area to ensure the safety of residents. Red Bank experienced the Red Fire in 2020. The evacuation area for Red Bank is 9.11 square miles. The population of Red Bank is 81 people with around 36 households. The average household size is 2.25 and the median age in the town is 52.1 years old. The average household income is \$69,465 and the average price of a home is \$433,333. Most people in the community drive around 10-14 minutes to work. 2.4% of people walk to work and little to no people bike, carpool, or take public transit.

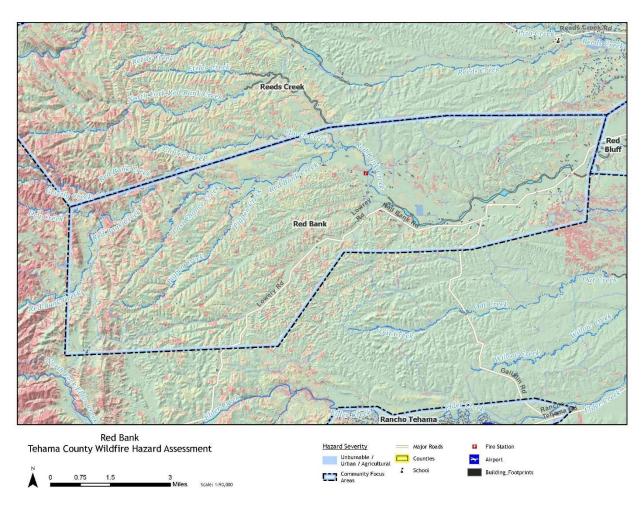


Figure 53 - Red Bank Wildfire Hazard Assessment

REEDS CREEK

Reeds Creek is an agricultural subdivision community west of Red Bluff and northeast of Red Bank. Residences in this community are primarily rural residential and are bisected by the creek which it is named after. The terrain is hilly as it is near the foothills of the Mendocino National Forest. There are three (3) ingress-egress points: Reeds Creek Road, Live Oak Road, and Red Bank Road. Reeds Creek is in a High Fire Hazard Severity Zone.

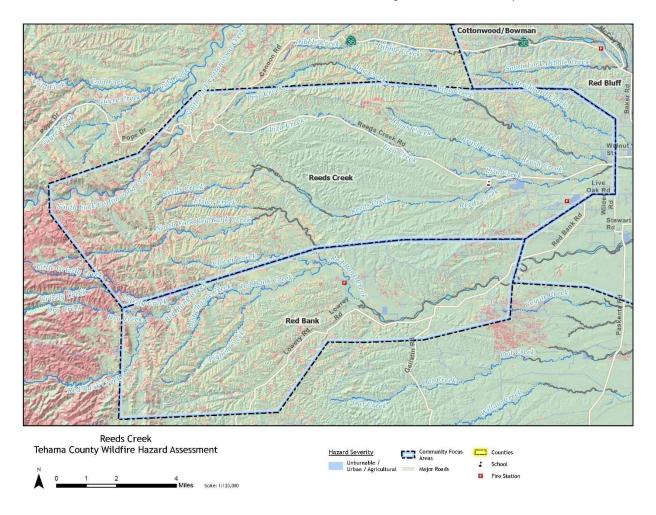


Figure 54 - Reeds Creek Wildfire Hazard Assessment

CITY OF RED BLUFF

The City of Red Bluff is the largest city and the most urbanized area in Tehama County. The city is bisected by the Sacramento River and I-5, with a majority of the city located on the west side of the Sacramento River and I-5. The city primarily consists of dense residential areas, businesses, several community parks and its own airport, Red Bluff Airport. The city is served by its own fire station, Red Bluff City Fire Department and CAL FIRE/Tehama County Fire Station 1. There are five (5) ingress-egress points, Main Street, Jackson Street, Monroe Street, Walnut Street and Oak Street. While Red Bluff is in a Low Fire Hazard Severity Zone, there is the potential risk of flooding due to its proximity to the Sacramento River. The population of Red Bluff is 14,557 people with approximately 5,806 households, the average household size is 2.43, and the median age in Red Bluff is 33.9. The median household income is \$41,004 and the average price of a home is \$213,200. Most people in the city commute approximately less than 10 minutes (42.6%) to work. 79.1% drive alone to work, 10.2% carpool, and the remaining 10.7% walk, bike, or take public transportation to work.

KEY EVACUATION ROUTE CONSIDERATIONS FOR RED BLUFF:

- High number of access points per population
- Over 10 neighborhoods with only one egress point and over 850 residences combined.
- Several key evacuation routes serve as the only access with lower-rated pavement conditions

SEVERAL ROADWAYS IDENTIFIED IN PUBLIC OUTREACH AS ROADS THAT HAD PREVIOUSLY BEEN UNUSABLE DUE TO A NATURAL EVENT ARE:

- Jackson Street
- Southridge Drive
- McCoy Road
- Reeds Creek Road
- Kaer Avenue
- Antelope Boulevard
- Flores Avenue
- Third Street
- No identified shelter/assembly/refuge locations

FLEET ANALYSIS IDENTIFIED THE FOLLOWING ROADWAYS THAT MAY BE PINCH POINTS IN AN EVACUATION:

Main Street

Belle Mill Road

Oak Street

SR 36

Antelope Boulevard

Sale Lane

Breckenridge Street

Crittenden Street

SEVERAL POTENTIAL PINCH POINTS WHERE EVACUATION ROUTES CONVERGE INCLUDE:

Beegum Road / Main Street

Paskenta Road / Walnut Street

Adobe Road / I-5

Walton Avenue / Main Street

Main Street / Adobe Road

Breckenridge Street / Main Street

Walnut Street / Jackson Street

Madison Street / Walnut Street

Madison Street / Oak Street

Walnut Street / Main Street

Oak Street / Main Street

Jackson Street / Main Street

Center Street / Oak Street

Oak Street / I-5

SR36 / Sale Lane

Sale Lane / Belle Mill Road

Kaer Avenue / Belle Mill Road

SR36 / Chestnut Avenue

Jackson Street / Madison Street

Main Street / Diamond Avenue

Main Street / Luther Avenue

Main Street / I-5 interchange.

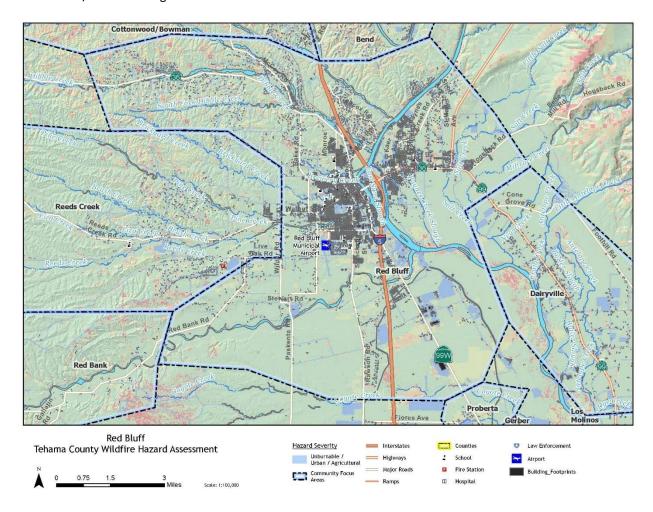


Figure 55 - Red Bluff Wildfire Hazard Assessment

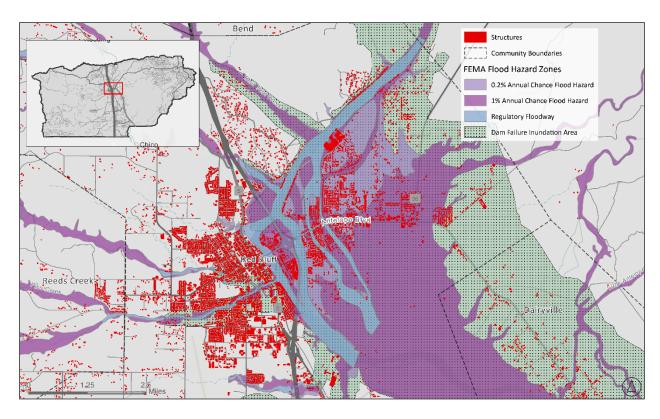


Figure 56 - Red Bluff Flood Hazard Assessment

BEND

Bend is a small rural town in Tehama County, six (6) miles north-northeast of Red Bluff. The area was historically named Horsethief Bend, Sanders Bend and Big Bend. "Bend" refers to the Sacramento River creating nearly a four (4) mile course in a horseshoe shape and meandering south again, leaving nothing but a short neck of land. Many properties are built along the east bank of the Sacramento River. The population of Bend is 883 people with roughly 382 households. The average household size is 2.30 and the median age in the town is 56.1. The average household income is \$59,067 and the average price of a home is \$426,471. Most people in the community drive around 20-24 minutes to work. 8.6% of people carpool to work, 5.2% walk and few to no people bike or take public transit.

The area is at high risk of flooding due to its proximity to the Sacramento River, particularly the low elevation area just east of the Bend Bridge on Bend Ferry Road. This area is a well known flood prone section. Bend is in a Low Fire Hazard Severity Zone. It is three (3) miles away from I-5 and it has one (1) ingress-egress point over the Bend Bridge, connecting to Jelly's Ferry Road. Bend has not had any fires recently, but it was near the 2018 Sun fire. The evacuation area for Bend is 15.76 square miles.

Project recommendations that would improve the safety and emergency accessibility in the Bend area include mitigation of the flood hazard on Bend Road with raising the road or re-alignment. Additionally, developing an emergency access improvement near the end of Bend Ferry Road (40.278158932173504, -122.1818146386587), over Paynes Creek to the Hog Lake Trailhead at SR 36.

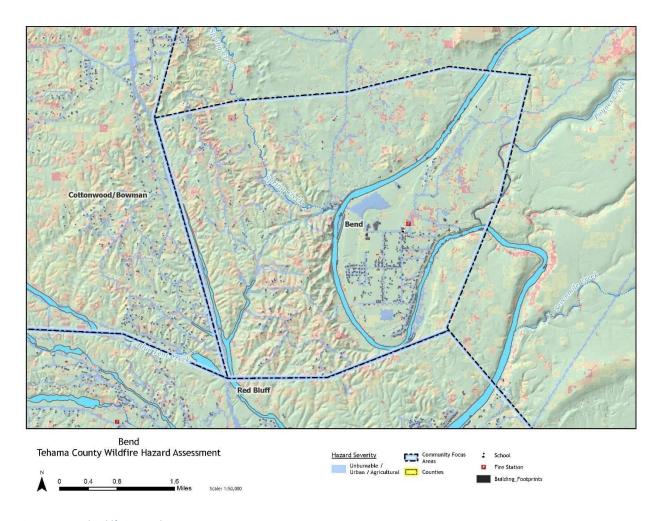


Figure 57 - Bend Wildfire Hazard Assessment

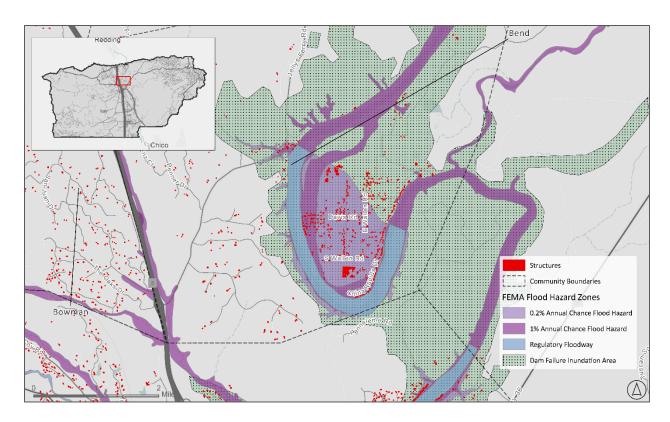


Figure 58 - Bend Flood Hazard Assessment

COTTONWOOD

Cottonwood is a larger town on the Tehama/Shasta County border. The southern portion of the town, where it is bisected by Cottonwood Creek, belongs to Tehama County. Additionally, the I-5 bisects the town and in Tehama County, most residences are located on the west side of I-5. Cottonwood primarily consists of agricultural lands and rural subdivisions, including the community of Bowman. The fire risk is greater due to denser vegetation and sloped hillsides. Cottonwood has experienced the Valley Fire in 2004, the Coleman Fire in 2008, and the Clover Fire in 2013. The evacuation area for Cottonwood is 122.77 square miles. The population of Cottonwood is 12,042 people with around 4,530 households. The average household size is 2.66 and the median age in the town is 45.6. The average household income is \$67,019 and the average price of a home is \$360,558. Most people in the community commute approximately 30-34 minutes to work. 4.4% of people carpool to work, 1.9% walk, 0.5% of people take public transit and 87.9% of people drive alone.

Key evacuation route considerations for Cottonwood:

- Separate from Lake California, there are over 15 neighborhoods with only one egress point and over 1,200 residences combined.
- Several neighborhoods are located on key evacuation routes serving as the only access with lower rated pavement conditions

Roadways identified through public outreach as roads that had previously been unusable due to a natural event are:

- Bowman Road
- Bywood Drive

Several potential pinch points where evacuation routes converge include, but are not limited to the following:

Locust Street / 4th Street

Rhonda Road / Gas Point Road

4th Street / I-5

Main Street / Front Street

Main Street / 1st Street

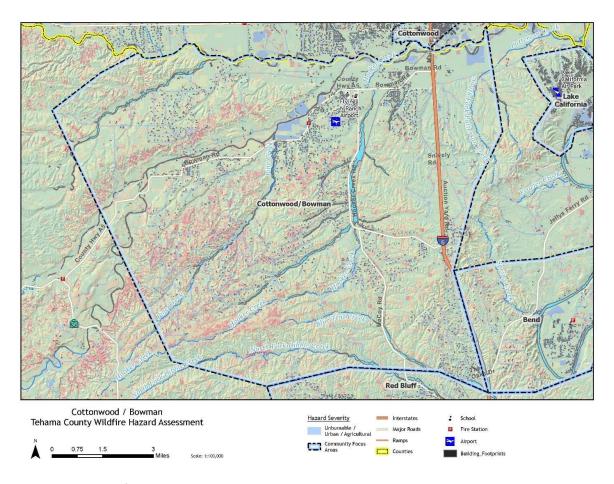


Figure 59 – Cottonwood / Bowman Wildfire Hazard Assessment

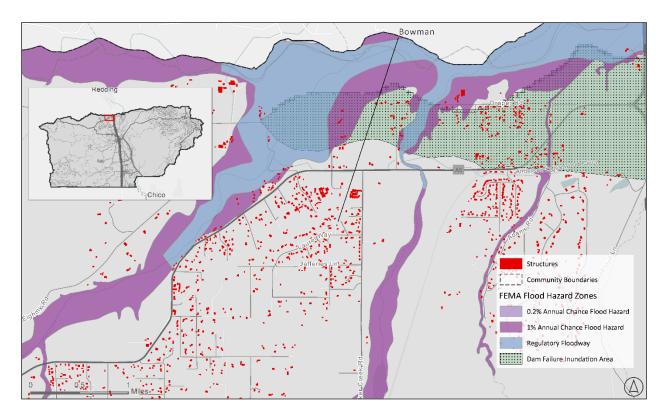


Figure 60 - Bowman Flood Hazard Assessment

LAKE CALIFORNIA

Lake California is a gated, private community situated between Anderson and Red Bluff to the east of Cottonwood. This residential enclave spans approximately 5,950 acres and includes approximately 2,200 lots, and views include Mt. Lassen, Mt. Shasta, and the Trinity and Siskiyou Mountain Ranges in the distance. The community's population comprises approximately 3,639 residents living in around 1,330 households, with an average household size of 2.67. The median age of residents stands at 38.8 years, and the median household income is \$93,750 (2022 ACS data), with a median home value of \$313,300. Most residents report an average commute time of 44.9 minutes to work, with 90.5% driving alone to work, 5.87% working from home, 3.6% carpooling, and limited usage of biking, walking, or public transit.

This private community features a variety of amenities, such as a private lake for recreational boating and fishing, a swimming pool, tennis courts, airplane landing strip, equestrian center, lakeside clubhouse and event lounge, boating launch into the Sacramento River, campground, ample RV and motorhome storage, parks, and open trails. Notably, the campground and equestrian center present potential fire-related concerns due to the presence of extensive fuels and limited natural fire breaks. Lake California is home to a private airplane landing strip, which serves as a strategic shelter-in-place location. The community is subdivided into two main sections of housing developments, with one densely populated area surrounding Lake California. The primary road for the southern subsection of the community is Rio Alto Drive, while the other section exhibits more scattered developments, with cul-de-sacs along River View Drive and the primary entrance and exit (ingress/egress) point of Lake California Drive.

Lake California's topography comprises rolling hills and an Oak Woodland ecosystem situated on the west bank of the Sacramento River, which naturally acts as a fire break against potential threats from the eastern portion of the County. Residents within this community include retirees and commuters who travel short distances to Redding, Anderson, Cottonwood, and Red Bluff. From the entry/exit gate of Lake California, a 20-minute drive takes one to Redding in the north or Red Bluff in the south. Nearby, residents can access local shops in Cottonwood and Anderson, with additional regional options available in Redding and Red Bluff.

Lake California has previously experienced wildfire events, including the West Fire in 2003 and the Adams Fire in 2018. Situated within a High Fire Hazard Severity Zone, the community possesses just one ingress-egress point, presenting potential challenges for evacuation, like those observed during the Camp Fire in 2018. Lake California is strategically positioned five miles from I-5, offering the potential for additional evacuation routes.

Public outreach and data analysis have identified Lake California as a top area of concern due to its very High Fire Hazard Priority, a high number of structures, and the reliance of many residents on a shared evacuation route. Three evacuation shelter locations and shelter-in-place areas have been identified. The County is pursuing funding to expand Lake California Drive to support a larger traffic flow, which includes the addition of a walking and biking multi-use path to serve as additional access for emergency services. This path will be constructed to accommodate fire trucks, and the County is actively evaluating other ingress and egress routes for further safety enhancements. Additional mitigation measures include a secondary fire lane access south to Jelly's Ferry Road. This project will ultimately be a secondary access to this isolated community.

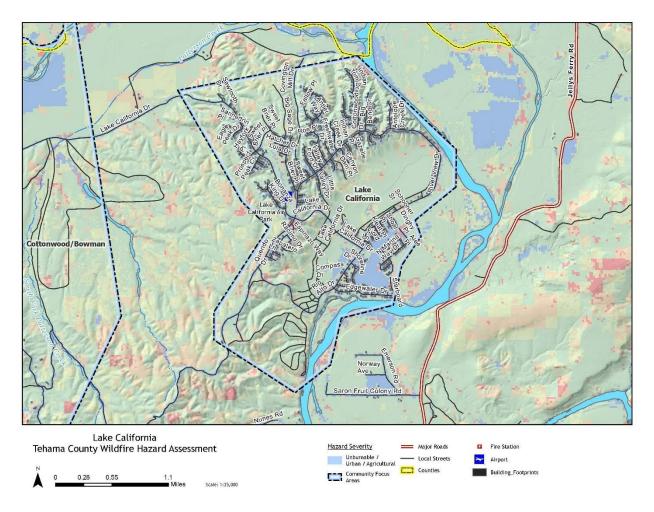


Figure 61 - Lake California Wildfire Hazard Assessment

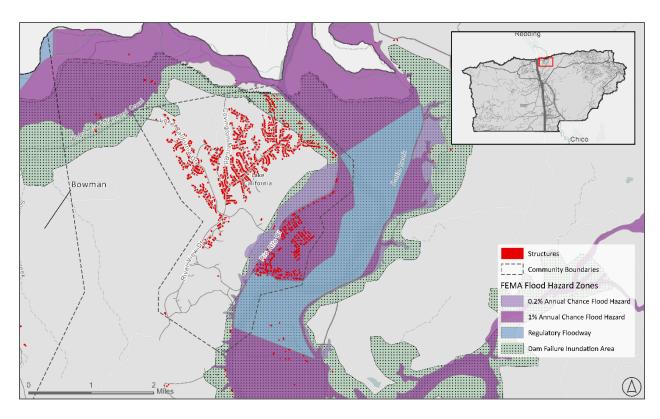


Figure 62 - Lake California Flood Hazard Assessment

DALES

Dales is a community 10 miles northeast of Red Bluff. Dales was a popular travel stop in the mid-1800s due to its location between Red Bluff, Manton, and the Lassen Volcanic National Park. Flooding has historically been an issue in Dales. The Ishi Wilderness, located near Dales is an area dedicated to the Paskenta Band of Nomlaki Indians and Yana-Yahi tribes of which Dales is a part of their ancestral lands. The community is densely forested and bisected by SR-36 and Paynes Creek. Dales is in a Moderate Fire Hazard Severity Zone and has two (2) ingress-egress points. In 2018, Dales experienced the Dales Fire. A lack of safe and available ingress-egress points can lead to high dangers during a potential evacuation. The evacuation area for Dales is 1.36 square miles. The population of Dales is 23 people with around 10 households. The average household size is 2.10 and the median age in the town is 52.5. The average household income is \$37,784 and the average price of a home is \$175,000. Most people in the community commute approximately 90 minutes to work. 0% of people carpool to work and little to no people walk, bike, or take public transit.

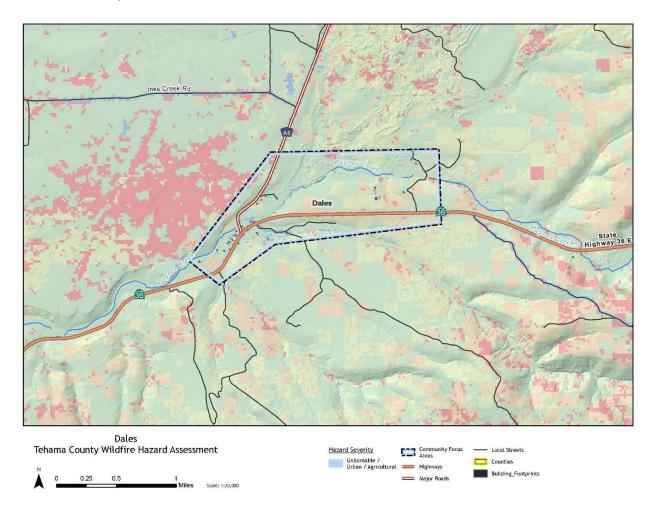


Figure 63 - Dales Wildfire Hazard Assessment

PAYNES CREEK

Paynes Creek is located along SR-36 and neighbors the creek, which it is named after. Paynes Creek is in a Very High Fire Hazard Severity Zone. There are four (4) ingress-egress points in this community. Paynes Creek experienced the Dye Fire in 2007 and the Lane Fire in 2018. Paynes Creek contains CAL FIRE Paynes Creek Station and Tehama County Fire Station 21. The evacuation area for Paynes Creek is 9.47 square miles. The population of Paynes Creek is 121 people with roughly 20 households. The average household size is 5.60 and the median age is 54.5 years old. The average household income is \$41,246 and the average price of a home is \$183,333. Most people in the community drive over 90 minutes to work. Little to no people bike, carpool or take public transit and 10% of people walk to work.

Key evacuation route considerations for Paynes Creek:

- Long distance from I-5
- Good number of access points per population, very high fire risk

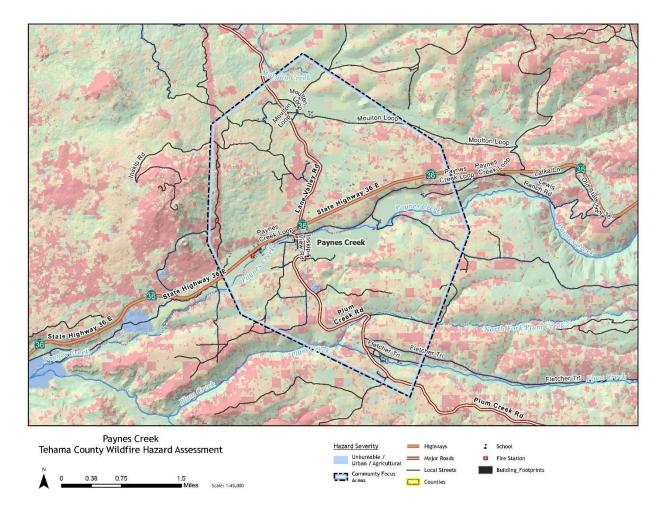


Figure 64 - Paynes Creek Wildfire Hazard Assessment

MANTON

Manton is a small community located in the northeastern area of Tehama County. The community is bisected by the Tehama/Shasta County line and Digger Creek. Manton is north of SR-36 and west of Mt. Lassen. The community primarily consists of rural residential and agricultural lots, with the CAL FIRE Manton Fire Station located in the town core. The community is in a Very High Fire Hazard Severity Zone due to its relatively flat terrain and densely forested areas within the community. Manton has two (2) ingress-egress points. The population of Manton is 291 people with approximately 146 households and a household size of 1.92. The median age 74.2, raising concern for mobility of the elderly population during potential evacuations. The median household income is \$118,199 and the average price of a home is \$355,400. Most of the community (98.4%) drive alone to work, 44.3% travel less than 10 minutes and little to no people carpool, bike, walk or take public transit.

Key evacuation route considerations for Manton:

- Long distance from I-5
- Good number of access points per population
- Very High Fire Risk
- Identified safe refuge area location

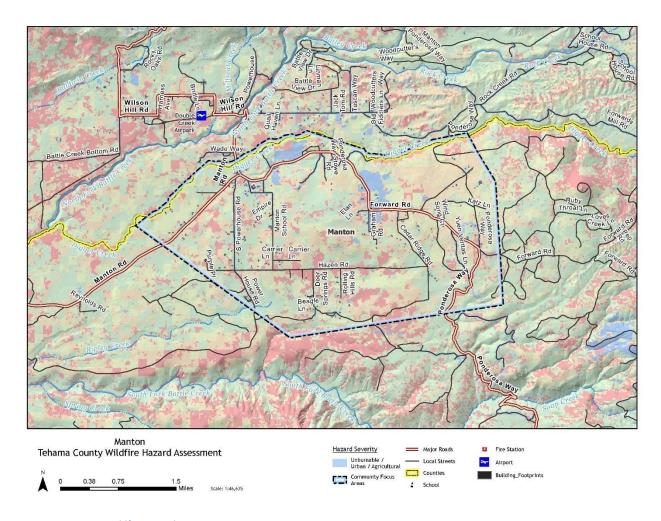


Figure 65 - Manton Wildfire Hazard Assessment

MILL CREEK

Mill Creek is a small community that is sparsely dispersed in the Sierras, south of Mt. Lassen and bisected by SR-36. Mill Creek is not currently considered a High Fire Severity Zone because of recent fire history that has resulted in fuel reduction; however, it is near Mineral, which is a High Fire Hazard Severity Zone. It is currently considered a Low Fire Hazard Severity Zone but runs the risk of potential volcanic activity, therefore the community will be evaluated as a High Fire Hazard Severity Zone. There are only three (3) ingress-egress points in this community, SR-36, 89 and 172. Mill Creek experienced the Onion Fire in 2008, Mill Fire in 2012, the Wilson Fire in 2018 and the Stump Fire in 2020. Houses and cabins are dispersed throughout the sparsely forested area. The lack of ingress-egress points makes it a greater area of concern for evacuation. The evacuation area for Mill Creek is 2.24 square miles. The population of Mill Creek is six (6) people with approximately (2) households. The average household size is three (3) and the median age in the town is 65 years old.

Key evacuation route considerations for Mill Creek:

- Long distance from I-5
- 2 access points
- Very High Fire Risk

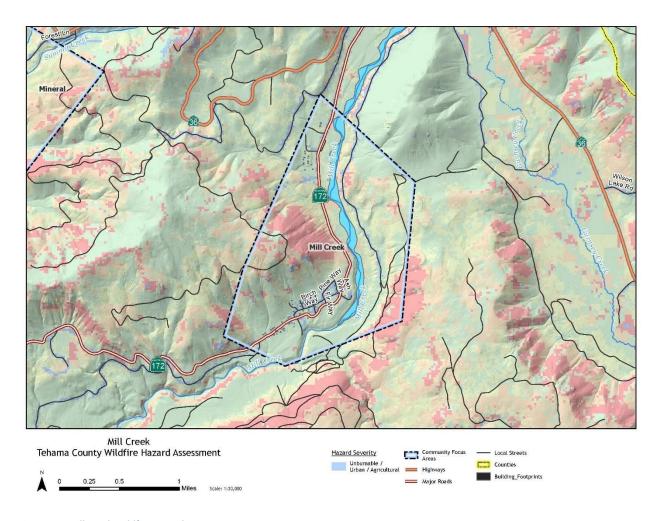


Figure 66 - Mill Creek Wildfire Hazard Assessment

MINERAL

Mineral is located within a region designated as a Very High Fire Hazard Severity Zone. This sparsely populated area is intersected by several major roads, including SR-36 and SR-172, and is situated to the southwest of Mt. Lassen. The community primarily consists of small cabins scattered along the road network, and a substantial number of homeowners use their properties primarily for vacation purposes. In proximity to Mineral, you can find notable attractions such as the Lassen Volcanic National Park Headquarters and the McGowan Cross Country Ski Area. The landscape of Mineral is characterized by dense forests, with Ponderosa Pine being the predominant vegetation. The community benefits from 3 distinct ingress-egress points.

The Mineral area is traversed by significant transportation facilities, including SR-17, SR-36, SR-172, and SR-89, which may potentially serve as evacuation routes. Beginning at the base of the Sierra Foothills, Mineral ascends to higher altitudes and is situated within a High Fire Severity Zone, primarily due to the presence of Pine trees and the steep sloping terrain. The sparse population, mountainous landscape, and scattered cabins contribute to an elevated risk to both structures and residents in this region, including the nearby Mill Creek area.

Historically, Mineral has faced several wildfire events, including the Onion Fire in 2008, the Mill Fire in 2012, the Wilson Fire in 2018, and the Stump Fire in 2020. The designated evacuation area for Mineral spans 7.07 square miles. The community of Mineral is home to 72 residents living in approximately 42 households. The average household size is 1.57, with a median age of 54.6 years. The average household income is \$36,191, and the typical home price is \$191,667. Most residents in the community report an average commute time of around 90 minutes.

Mineral is situated in the northwest region of the County, a region characterized by low population density and a notable fire risk, often with multiple access points. Although Mineral is somewhat distant from I-5, it benefits from multiple state routes that could potentially serve as evacuation routes. The area boasts a favorable ratio of access points to population. A roadway intersection crucial for evacuation is marked as a planned project for evaluation and reconstruction. Additionally, the community would benefit from vegetation clearing along roadways as a recommended project to slow the spread of fires and reduce heat intensity during fire events.

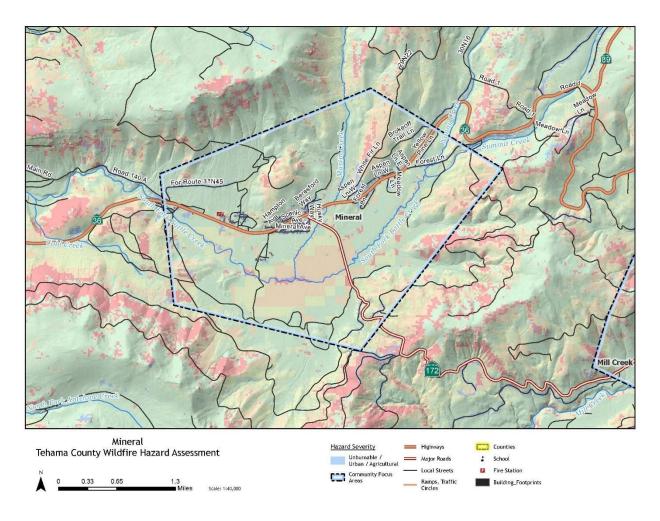


Figure 67 - Mineral Wildfire Hazard Assessment

PONDEROSA SKY RANCH

Ponderosa Sky Ranch is in a Very High Fire Hazard Severity Zone in a densely forested area. The community has an airport, the Ponderosa Sky Ranch Airport, and borders SR36. There are only two (2) ingress-egress points in this community making it one of Tehama's highest-priority evacuation areas. Poderosa experienced the Ponderosa Fire in 2012 and was nearly affected by the Lane Fire in 2018. Evacuation during fires is crucial to this area to ensure the safety of its residents. The evacuation area for Ponderosa Sky Ranch is 4.34 square miles. The population of Ponderosa Sky Ranch is 118 people with approximately 41 households. The average household size is 2.66 and the median age is 54.2 years old. The average household income is \$39,191 and the average price of a home is \$191,667. Most people in the community commute approximately 90 minutes to work. Little to no people bike, carpool or take public transit and 10.3% of people walk to work.

Key evacuation route considerations for Ponderosa Sky Ranch:

- Long distance from I-5
- Medium number of access points per population
- Medium number of structures
- Low fire risk

Ponderosa Sky Ranch project recommendations include regular roadside vegetation management projects, and a potential secondary access route to the southeast connecting the community directly to SR 36.

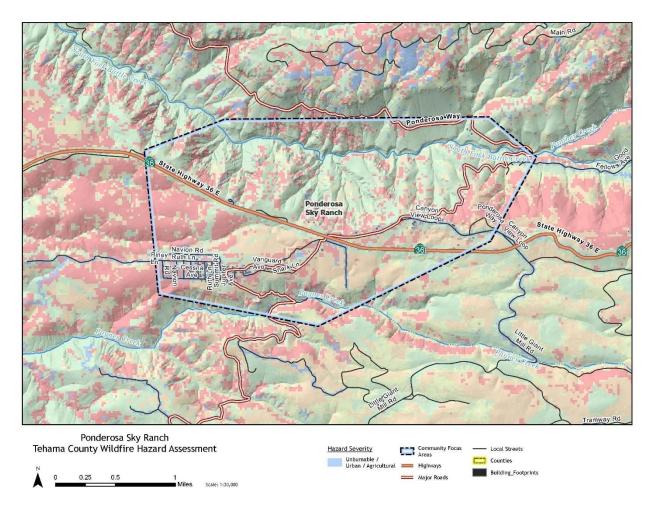


Figure 68 - Ponderosa Sky Ranch Wildfire Hazard Assessment

SURREY VILLAGE

Surrey Village area is an unincorporated community accessed by Adobe Road on the north bank of the Sacramento River and north of the City of Red Bluff City, containing a population of 1,743 people with 814 housing units. SR36 is east, and I-5 is west of the community with the town of Bend to the north. The area is zoned very low density residential (RE-B), consisting of primarily residential lots. The area is considered a high fire hazard zone according to the Tehama County Regional Viewer. Residential lots along the Sacramento River are in the FEMA zone designated AE or Area inundated by 100-year flood with floodwater elevation determined.

Surry Village is served by Adobe Road from the west connecting to Interstate 5 or Main Street in Red Bluff. The development is 2.4 miles from Interstate 5 and is isolated and constrained. Adobe Road serves as the only access route in or out of the community starting at Wilcox Road and eastward.

Key evacuation routes and considerations:

- Adobe Road is the only ingress/egress to Surrey Village.
- The community is vulnerable to flooding and wildfire.

Key project recommendations:

- Explore and plan for a secondary emergency access route to the north of the community linking to Penneleme Road and Jelly's Ferry Road.
- Develop a project that includes paved surface pullouts and passing opportunities on Adobe Road, particularly between Surrey Village and Wilcox Road.
- Identify a location for an area of refuge.

6. NEEDS EVALUATION AND RECOMMENDATIONS

The following sections outline Countywide evacuation system recommendations and a potential timeline for implementation (i.e., long-term, medium-term, or short-term). Road network and access recommendations were combined with the proceeding policy recommendations and finally the fire modeling output data then gleaned best practices to produce the recommended priority projects culminating all study data and community input at the end of this chapter.

6.1 ROAD NETWORK AND ACCESS RECOMMENDATIONS

SHORT TERM

- 1. Thin, masticate, and/or prescribed burns in the hot spots along key roadside locations identified in this chapter through extensive GIS analysis, LiDAR flight analysis, and field reviews.
- 2. Establish inter-agency agreements and communication protocols for manned control of pinch points in an evacuation.
- 3. Implement an evacuation signage project.
- 4. Continue efforts to promote awareness of **Genasys: Mass Notification and Evacuation Management Platform** and other evacuation resource guides through traditional means such as websites, printed materials, and social media, and explore new avenues for dissemination to the public.
- 5. Prepare plans and enhance existing outreach for vulnerable populations that may require assistance.

MEDIUM TERM

- 1. Evaluate and improve roadways that have previously been unusable during a natural event.
- 2. Prioritize roadway improvement projects, such as pavement upgrades, drainage improvements, and clear zone expansion on evacuation routes.
- 3. Establish shelters, assembly points, and safe refuge area. This may include entering into mutual agreements. Include information about the locations in evacuation guides and media.

LONG TERM

- 1. Explore and construct, as feasible, secondary access routes for communities with only one point of access.
- 2. Evaluate potential widening or improvement projects for roadways identified in the evacuation modeling as potentially congested during an evacuation.
- 3. Evaluate and improve, as feasible, bridges located on evacuation routes and single access routes.
- 4. Evaluate opportunities for and, where feasible, construct multiuse paths along evacuation routes, that can serve as alternate emergency access during an evacuation event, and connect to broader multimodal networks for everyday use.

RECOMMENDATION 1: Trim, mastication, and prescribed burning at key hot spot areas along evacuation routes. These roadside areas have been detailed in the projects list at the end of this chapter.

RECOMMENDATION 2: Explore and construct as feasible, new emergency fire lane/secondary access for communities with only one access route. There are several identified neighborhood communities and fire hazard risks for those with only one egress. This base list was used as a starting point for further analysis and specific fire lanes and secondary access projects are recommended in the projects list at the end of this chapter.

Table 2 - Communities/Neighborhoods with 1 Ingress/Egress Point

COMMUNITY	NEIGHBORHOODS	EST. POPULATION	FIRE HAZARD PRIORITY
Cottonwood	Lake California	2,500	Very High
Cottonwood	Adams	600	Very High
Cottonwood	Broadhurst	500	Very High
Cottonwood	Laurel	400	Very High
Red Bluff	Surrey Village/Adobe Rd.	400	Very High
Cottonwood	Phyllis	300	Very High
Cottonwood	Oak Hollow	300	Very High
Red Bluff	Saddlebrook	300	Very High
Red Bluff	Oak Knoll	300	Very High
Red Bluff	Penner	300	Very High
Cottonwood	Eighmy	200	Very High
Cottonwood	View	200	Very High
Cottonwood	Wildridge	200	Very High
Cottonwood	Farquhar	200	Very High
Cottonwood	Del Norte	200	Very High
Cottonwood	Terry	200	Very High
Cottonwood	Saddleback Ridge	200	Very High
Cottonwood	Prentice	200	Very High
Cottonwood	Plateau	200	Very High
Red Bluff	Via Del Roble	200	Very High
Red Bluff	Noble Oaks	200	Very High
Red Bluff	Sacramento	200	Moderate
Red Bluff	Quercus Lobata	200	Very High
Red Bluff	Meadowgate	200	Very High
Red Bluff	Kinney	200	Very High
Red Bluff	Mater	200	Very High
Cottonwood	North Granite	100	Very High

Cottonwood	Starr	100	Very High
Cottonwood	Во	100	Very High
Red Bluff	Ranchero	100	Very High
Red Bluff	Pleasant Valley	100	Very High
Red Bluff	Peppertree	100	Very High

RECOMMENDATION 3: Improve roadways that have previously been unusable during a natural event.

Table 3 provides a list identified through the public outreach efforts. The roadway network should be further evaluated to identify other roads at risk due to elevation (snow), inadequate clear zones, or other limitations.

Table 3 - Previously Unusable Roads

ROADS PREVIOUSLY UNUSABLE DUE TO NATURAL EVENTS	COMMUNITY
Bowman Road / Bywood Drive	Cottonwood
Jackson Street	Red Bluff
Rancho Tehama Road	Rancho Tehama
Southridge Drive	Red Bluff
McCoy Road	Red Bluff
Bowman Road	Cottonwood
Rivers Edge (area)	Red Bank
Red Bank	Red Bank
Reeds Creek Road	Red Bluff
Bowman Road	Cottonwood
Kaer Avenue	Red Bluff
Antelope Boulevard, Main Street, Chestnut Avenue	Red Bluff
Baker Road	Red Bluff
Flores Avenue and Third Street	Red Bluff
Flores Avenue	Red Bluff
Tehama Avenue	City of Tehama
Hwy 99	Several
CR 306	Paskenta/Flournoy

RECOMMENDATION 4: Evaluate potential widening or other improvement projects for roadways identified in the evacuation modeling as at risk for severe congestion during an evacuation.

Table 4 shows the roadways that were identified in the model as having relatively high levels of traffic and congestion.

Table 4 - Historically Congested Roadways

ROUTE	СІТҮ	LOCATION	NOTES
Antelope Blvd / SR 36	Red Bluff	Near I-5	Slowed speeds in simulation and higher/medium traffic densities
I-5	Corning	Solano St	Slowed speeds in simulation
South Ave	Corning	I-5 Connection	Highest traffic densities
Main Street	Red Bluff	I-5 Connection	Highest traffic densities
Belle Mill Rd	Red Bluff	Connects to SR 36/Antelope which leads to I-5	Highest traffic densities
San Benito Ave	Gerber and Proberta	Major Route, connects to SR 99	Highest traffic densities
Oak St	Red Bluff	Connects to Main St to I-5	Highest traffic densities
SR 36	Red Bluff	Connects to Main St/SR 36 to I-5	Higher/medium traffic densities
Sale Ln	Red Bluff	Provides access to SR 36/Antelope	Higher/medium traffic densities
Solano St	Corning	Major route, provides access to I-5	Highest traffic densities
Orangewood Rd	Between Richfield/ Corning	Access to SR 99	Highest traffic densities
Breckenridge St	Red Bluff	Access to Main St to I-5	Higher/medium traffic densities
Crittenden St	Red Bluff	Access to Main St to I-5	Highest traffic densities
C St	City of Tehama	Access to SR 99	Highest traffic densities

RECOMMENDATION 5: Evaluate and improve as needed, bridges on evacuation routes and single access routes.

RECOMMENDATION 6: Evaluate opportunities for multiuse paths along evacuation routes that can serve as emergency response routes during an evacuation and as part of the multimodal network for everyday use (long-term).

The following roadways are evacuation routes that should be considered prime locations for the addition of multiuse paths which could facilitate response during an evacuation and would also connect well and enhance the existing bike/ped network:

- 1. In the Cottonwood area, Bowman Road and Lake California Drive have existing and proposed trails along evacuation routes.
- 2. In the Bend area, Jellys Ferry Road has proposed trails along evacuation routes.
- 3. SR 99 through Dairyville, a primary evacuation route, has planned trails.

- 4. In Los Molinos, Aramayo Way and SR 99 have existing and proposed trails along evacuation routes.
- 5. In Corning, Hoag Road, an evacuation route, has proposed trails.

RECOMMENDATION 7: Establish agreements/communication protocol for manned control of pinch points in an evacuation (short-term).

Subsequent sections of this report indicate potential pinch points; however, the unpredictable nature of evacuations precludes identifying exact needs. Agreements should be flexible to situational needs.

RECOMMENDATION 8: Evacuation signage project (short-term).

Evacuation routes, as identified in FIGURES 70-95, should be signed to inform motorists of safe, efficient routes.

RECOMMENDATION 9: Prioritize roadway improvement projects, such as pavement upgrades, drainage improvements, and clear zone expansion on evacuation routes (medium-term) as identified for each community in **FIGURES 70-95**.

RECOMMENDATION 10: Establish shelters, assembly points, and safe refuge areas. This may include entering into mutual agreements. Include information about the locations in evacuation guides and media (medium-term).

RECOMMENDATION 11: Continue efforts to promote awareness of Genasys Protect and other evacuation resource guides through traditional means (websites, printed materials, and social media) and explore new avenues for dissemination to the public (short-term).

RECOMMENDATION 12: Prepare plans and enhance existing outreach to vulnerable populations that may require assistance during an evacuation (short-term).

6.2 COUNTYWIDE POLICY RECOMMENDATIONS

Emergency evacuation reports typically involve detailed plans and policies for safely and efficiently evacuating people from a location during a crisis or disaster. Action policies within these reports are specific guidelines that outline the steps to be taken by individuals, organizations, or authorities during an evacuation. These policies are crucial for ensuring that people can quickly and safely leave the area, whether it's due to a natural disaster (ex. hurricanes, floods, wildfires, earthquakes), or a man-made emergency (ex: industrial accidents), or other hazardous situations. The specific contents of action policies in an emergency evacuation report will depend on the type of facility or location, the nature of the potential emergencies, and the relevant regulations and best practices. These policies are essential for minimizing risks and ensuring the safety of all individuals involved in an evacuation. Tehama County adheres to California state laws and regulations governing wildfire response, evacuation, and land-use planning to mitigate fire risks. The risk assessment includes factors like climate, topography, vegetation types, and fire history.

Tehama County relies on a coordinated approach involving local, County, and regional agencies for wildfire response and evacuation. This includes local fire departments, law enforcement, and coordination with regional agencies like the California Department of Forestry and Fire Protection (CAL FIRE). Tehama County allocates resources for wildfire evacuations, including a fleet of emergency vehicles and cooperation with local shelters and healthcare providers. Coordination between local, County, and regional agencies ensures efficient resource allocation. Public education campaigns emphasize the importance of preparedness, creating defensible space, and evacuation readiness. Efforts are made to engage non-English speaking populations and individuals with disabilities through community outreach programs. Past wildfires in the County, such as the 2020 Butte Fire, have provided valuable lessons in terms of the need for improved communication and faster evacuations. Adaptations in response strategies are being made based on these experiences.

RECOMMENDATIONS FOR IMPROVEMENTS INCLUDE:

- 1. Enhanced road maintenance in evacuation routes.
- 2. Designated evacuation routes, both primary and secondary, which are well-maintained and marked.
- 3. Yearly wildfire risk mapping.
- 4. Improved communication infrastructure using the Genasys notification software framework and solar powered sirens.
- 5. Collaboration with utility companies to mitigate the risk of power lines causing wildfires.
- 6. Clearly defined assembly points and staging areas for evacuees.
- 7. Procedures for timely evacuation notifications through emergency alerts, sirens, and social media.

EMERGENCY PREPAREDNESS TRAINING

- Training Programs: Develop a structured curriculum for emergency preparedness training. This
 curriculum should cover a wide range of topics, including hazard identification, risk assessment,
 evacuation procedures, first aid, and communication protocols.
- Community Engagement: Organize regular community meetings and workshops to engage residents

in the training programs. These can be conducted by local emergency management agencies, experts, or volunteers.

• Outreach Materials: Create informative brochures, pamphlets, and online resources that residents can access at any time to reinforce their knowledge and preparedness.

EVACUATION ROUTE MAINTENANCE

- Evacuation Routes: Establish and maintain well-defined primary and secondary evacuation routes. These routes should consider traffic flow, accessibility, and proximity to vulnerable populations. Maps or diagrams may be provided to illustrate these routes.
- Alternative Routes: Identify alternative routes in case primary routes become congested or blocked.
 These routes should be well-maintained and suitable for evacuation traffic.
- Route Analysis: Conduct a detailed analysis of all evacuation routes, considering factors like road conditions, road capacity, terrain, and proximity to emergency shelters.
- Regular Inspections: Implement a routine inspection schedule for bridges, tunnels, and critical roadways. Ensure that these structures meet safety standards and can withstand the demands of an emergency evacuation.

PUBLIC COMMUNICATION AND ALERTS

- Communication: Maintain clear and effective communication channels throughout the evacuation
 process. This includes continuous updates to residents, coordination among response agencies, and
 information sharing with the public. All communication will be done through the powerful evacuation
 notification system Genasys.
- Emergency Alert Systems: Establish and maintain the state-of-the-art emergency alert system Genasys. This system should be capable of sending alerts via text messages, phone calls, sirens, social media, and local media outlets.
- Siren Installation: Implement a comprehensive plan to install solar-powered emergency sirens in all
 vulnerable communities throughout Tehama County. These sirens will serve as a vital audible alert
 system to complement and reinforce evacuation alerts, especially in situations where internet access
 is disrupted ensuring comprehensive coverage throughout the County.
- Evacuation Orders: Issue evacuation orders promptly using Genasys when a wildfire threat is
 identified. Clearly communicate the areas affected, the nature of the threat, and the urgency of
 evacuation.
- Website and Mobile Apps: Maintain a dedicated emergency website and mobile app where residents can find real-time information on evacuation routes, shelter locations, and emergency updates.
- Social media: social media to monitor and update official accounts with critical information during emergencies. Engage with the community online and address their concerns.

Accountability: Protocols for accounting for all personnel, visitors, or residents to ensure that no one
is left behind during the evacuation. This may involve checklists or electronic tracking systems. Efforts
are made to ensure that residents with limited access to technology are reached through door-todoor notifications and community networks.

TRAFFIC MANAGEMENT

- Traffic Management Plan: Develop a comprehensive traffic management plan that includes protocols
 for road closures, traffic diversions, and adjustments to traffic signal timing during evacuations to
 prevent congestion and gridlock on evacuation routes.
- Training for Personnel: Train law enforcement, traffic control personnel, and volunteers in the intricacies of traffic management during emergencies. Ensure they can adapt to evolving situations.
- Evacuation Drills and Training: Regular evacuation drills and training programs are conducted to familiarize residents and responders with evacuation procedures and to identify areas for improvement.
- Transportation and Mobility: Coordinate with local transportation providers to ensure the availability
 of buses, shuttles, and other means of transportation for evacuees, especially those without personal
 vehicles.

EVACUATION SHELTERS AND SERVICES

- Assembly Points: Designation of safe assembly areas where evacuees can gather after leaving the
 area. These areas are crucial for accounting for everyone and for the public to receive further
 instructions. These areas will be well-marked and accessible. Resources and support may be provided
 during the evacuation here, such as medical assistance, transportation, or communication facilities.
- Shelter Network: Establish a network of evacuation shelters strategically located to serve various neighborhoods. Ensure that each shelter is equipped to provide basic services and comfort for evacuees.
- Resource Stockpiles: Maintain stockpiles of essential resources at shelters, including medical supplies, non-perishable food, water, blankets, and pet care materials.
- Volunteer Support: Recruit and train volunteers to assist with shelter operations and services. Ensure they are well-coordinated and have clearly defined roles.

EVACUATION TIMING

- Early Warning System: Implement an early warning system that factors in weather forecasts, fire danger indices, and other critical data to trigger evacuation alerts. Alerts will be announced through Genesys, the evacuation notification software.
- Community Education: Educate residents about the importance of early evacuation. Conduct
 outreach campaigns to inform them about evacuation triggers and the potential risks of delaying
 evacuation.

SPECIAL NEEDS POPULATION

- Vulnerable Populations: Develop specific plans for evacuating individuals with special needs, such as the elderly, disabled, and those with medical conditions. Provide accessible transportation and shelters for them.
- Special Needs: Plans to accommodate people with special needs, such as those with mobility challenges, medical conditions, or language barriers.
- Specialized Assistance Plans: Develop individualized evacuation plans for areas with increased need during evacuations, such as the elderly and low-income populations. Assign additional personnel to assist these areas.
- Communication Channels: Establish communication channels to reach out to special needs populations during emergencies and provide them with necessary support.
- Transportation Assistance: Ensure that specialized transportation options are available for those who require mobility assistance.

RESOURCE ALLOCATION

- Funding and Resource Allocation: Allocate resources, such as emergency personnel, medical supplies, and shelter provisions, to support evacuees and first responders. Adequate funding includes resource acquisition and maintenance.
- Resource Coordination: Establish mechanisms for effective coordination among local, County, and
 regional agencies, including law enforcement, fire departments, and emergency management
 agencies. Develop protocols for the rapid and efficient deployment of resources based on the
 evolving needs of the emergency.
- Resource Inventory: Maintain an up-to-date inventory of emergency resources, including personnel, equipment, medical supplies, and fuel.

COLLABORATION WITH NEIGHBORING COMMUNITIES

- Mutual Aid Agreements: Establish mutual aid agreements with neighboring jurisdictions to provide and receive assistance as needed during emergencies.
- Interagency Agreements: Develop interagency agreements with neighboring communities to facilitate coordinated evacuations. Clearly outline roles and responsibilities.
- Joint Exercises: Conduct joint training exercises and drills with neighboring communities to ensure seamless collaboration in the event of a large-scale emergency that crosses jurisdictional boundaries.

COMMUNITY ENGAGEMENT AND EDUCATION

• Public Education and Outreach: Engage in public education campaigns to inform residents about wildfire risks, preparedness, and evacuation procedures. Efforts should be made to reach non-

English-speaking populations and individuals with disabilities.

- Continuous Outreach: Maintain ongoing outreach efforts through community meetings, workshops, and social media campaigns to keep residents engaged in preparedness efforts.
- Education Partnerships: Collaborate with schools and educational institutions to include emergency preparedness education in curricula and engage students in preparedness activities.
- Demonstration Events: Organize demonstrations and simulations to educate the community on evacuation procedures and the proper use of emergency kits.

EMERGENCY RESPONSE COORDINATION

- Unified Command Structure: Establish a unified command structure among emergency response agencies, clearly defining roles and responsibilities for each agency.
- Training Exercises: Conduct regular training exercises involving all agencies to ensure seamless coordination in complex emergency scenarios.
- Communication Protocols: Develop standardized communication protocols to enable agencies to share critical information effectively.
- Cross-Agency Collaboration: Tehama County emphasizes collaboration among local, County, and regional agencies to ensure a unified response during wildfires.
- Interagency exercises and joint training sessions are conducted.

TECHNOLOGICAL SOLUTIONS

- Traffic Monitoring Technology: Invest in state-of-the-art traffic monitoring technology, such as automated traffic cameras, sensors, and real-time traffic management software.
- GIS Mapping: Utilize Geographic Information Systems (GIS) for real-time mapping, route optimization, and the visual representation of evacuation plans.
- Mobile Apps and social media: Leverage mobile apps and social media platforms for real-time updates, communication with residents, and the dissemination of important information.

POST-EVACUATION SUPPORT

- Repopulation Plans: Develop plans for the systematic repopulation of evacuated areas. This should include coordinated efforts to ensure residents can safely return home.
- Traffic Management After Evacuation: Implement strategies for managing traffic and preventing congestion during the return phase, including staggered re-entry times and clear traffic instructions.
- Mental Health Support: Offer mental health services and counseling to residents who may have been traumatized by the emergency. Establish support centers and outreach programs to address their needs.

- Continuity of Operations: Ensure that essential services, businesses, and government operations are maintained during evacuations when possible.
- Review and Adaptation: Regularly review and update evacuation plans based on lessons learned from previous wildfire events and changing conditions.

RE-ENTRY / REPOPULATION

• Re-entry Procedures: Develop clear guidelines for when residents can safely re-enter evacuated areas once it's deemed appropriate. This may involve assessing the safety of infrastructure and air quality.

PETS / LIVESTOCK

 Animal Evacuation: Include policies for evacuating pets and livestock, including the availability of animal shelters and transportation for animals.

CONTINUOUS IMPROVEMENT

- After-Action Reviews: After each emergency event, conduct thorough after-action reviews involving
 all relevant agencies to identify strengths and weaknesses in the response and make necessary
 improvements.
- Plan Updates: Regularly update the evacuation and routing plans to incorporate lessons learned, accommodate changing infrastructure, and address shifts in demographics.
- Feedback Mechanisms: Establish feedback mechanisms for residents and responders to share their experiences and suggest improvements.

Action policies for emergency evacuation from wildfires in Tehama County are crucial for ensuring the safe evacuation of residents and communities during wildfire events. These action policies are regularly reviewed, tested, and updated to ensure their effectiveness and responsiveness to the specific wildfire risks faced by Tehama County. In implementing these expanded action policies, close collaboration with local government agencies, emergency management experts, community leaders, and the public is essential. Continuous evaluation, regular updates, and a commitment to the safety and well-being of the community will help ensure the success of the Tehama evacuation and routing study. Tehama County's action policies for wildfire evacuation reflect a proactive approach that addresses the specific risks of the region. The coordination between local, County, and regional agencies, public education initiatives, and a commitment to learning from past experiences demonstrate a comprehensive strategy for wildfire response and evacuation in the County. Ongoing efforts to improve infrastructure, communication, and collaboration is vital for enhancing the safety of residents in Tehama County during wildfire events.

6.3 RECOMMENDED PRIORITY PROJECT LIST

The following projects were identified through policy analysis findings, roadway network and access analysis, community outreach input, best practices observed in similar geographic areas, and roadway and fire behavior modeling analyses, producing the following prioritized projects sorted by community:

Table 5 - Priority Project List

Project Name	Project Type	Timeframe	Community	Cost	Location	Description
Evergreen Road Widening Project	Roadway Improvement	Medium- term	Bowman	\$500,000	Evergreen Road	Evergreen Road has been identified for roadway widening and clear zone expansion. The roadway will undergo construction to improve evacuation safety communitywide by creating roadways that are the proper width to support evacuees and emergency vehicles
Luce Griswold Road Paving	Roadway Improvement	Medium- term	Bowman	\$80,000	Bowman Road	Griswald is currently unpaved and the only secondary access road.
Bowman Road Right of Way Thin	Roadside Brush Thinning	Short-term	Bowman	\$19,904	Bowman Road	Thin in right of way as directed by forester. Target gray pine and ladder fuels. Prune larger oaks.
Bowman Road Right of Way Thin	Roadside Brush Thinning	Short-term	Bowman	\$23,264	Bowman Road	Thin in right of way as directed by forester. Target gray pine and ladder fuels. Prune larger oaks.
Bowman Road Right of Way Thin	Roadside Brush Thinning	Short-term	Bowman	\$15,460	Bowman Road	Thin in right of way as directed by forester. Target gray pine and ladder fuels. Prune larger oaks.
Bowman Road Right of Way Thin	Roadside Brush Thinning	Short-term	Bowman	\$15,008	Bowman Road	Thin in right of way as directed by forester.

						Target gray pine and ladder fuels. Prune larger oaks.
Bowman Road Right of Way Thin	Roadside Brush Thinning	Short-term	Bowman	\$43,764	Bowman Road	Thin in right of way as directed by forester. Target gray pine and ladder fuels. Prune larger oaks.
Countywide Emergency Siren System	Emergency Siren System (Countywide)	Short-term	Countywide	\$2,000,000	Countywide Emergency	Solar-powered sirens will be installed to alert those without internet access about evacuations and emergencies in all population areas of Tehama County. See community maps for each siren location.
Countywide Emergency Evacuation Wayfinding and Routing System	Evacuation Routing Signage Wayfinding System	Short-term	Countywide	\$250,000	Countywide	Reflective evacuation signs will be placed at this location to direct residents from their local roads to the nearest collector road(s) and/or arterial highway(s). If alternate evacuation routes are available for the community, these routes will be listed as traversable alternate routes during an emergency. Additionally, shelter-in-place locations for each community will be depicted as well. See community maps for each signage type and location and associated evacuation routes and available shelter areas.

Genasys Countywide Notification System	Genasys Notification Framework Rollout	Short-term	Countywide	N/A	Countywide	The community will be made aware of the new evacuation notification system called the Genasys Protect (formally known as Zonehaven) and other evacuation resource guides through traditional means (websites, printed materials, and social media).
Lake California Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Lake California	Unknown	Lake California Road	Lake California has been identified as needing an additional secondary access road for emergency evacuations. Extensive evaluation, private/public partnerships, project planning, and implementation will be pursued through subsequent projects, funding programs and regular discretionary programs.
Lake California Widening and Multiuse Path	Road widening and dual-purpose multiuse path for emergency ingress/egress and daily recreational use	Medium- term	Lake California	\$260,000	Lake California	Widen Lake California Drive and install a multi-use path along the shoulder to support emergency vehicles and to serve as an emergency response route during an evacuation. This path will double as a multimodal network for everyday use.

Wilson Hill Roadside Thinning	Roadside Mastication	Short-term	Manton	\$25,383	Manton Mill	Remove gray pine and selectively masticate brush for 150' off road.
Forwards Mill Maintenance	Roadside Mastication and Prescription Burning	Short-term	Manton	\$48,834	Manton Mill	Burn to maintain previous thinning. Some thinning may be needed to prep. Retain larger black oak.
Manton Roadside Thinning	Roadside Brush Thinning	Short-term	Manton	\$32,000	Manton Roadside	Thin 125' from road's edge as directed by forester. Target gray pine and ladder fuels. Retain black oak.
Manton Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Manton	Unknown	Manton Roadside	Manton has been identified as needing additional fire lanes/secondary access roads for emergency evacuations.
Forwards Mill Road Thinning – South	Roadside Brush Thinning	Short-term	Manton	\$151,501	Manton Mill	Thin 150' either side as directed by forester. Retain black oak.
Forwards Mill Thinning – North	Roadside Brush Thinning	Short-term	Manton	\$38,521	Manton Mill	Roadside thinning as directed by forester. Retain black oak and sugar pine. Desired future state is to maintain with prescription burning.
State Route 36/Battle Creek Road Safety Access Project	Roadway Improvement	Medium- term	Mineral	\$100,000	Battle Creek Road	Battle Creek Road has previously been unusable during a natural event will be evaluated and improved for efficient and successful evacuation.
State Route 172 Widening	Roadway Improvement	Medium- term	Mineral	\$100,000	State Route 172	Sections of SR 172 near Mineral have been identified for roadway widening and clear zone expansion. The

						roadway will undergo construction to improve evacuation safety communitywide by creating roadways that are the proper width to support evacuees and emergency vehicles
CR 306 Improvement Project	Roadway Improvement	Medium- term	Paskenta	\$100,000	Paskenta Improvement	This roadway is an evacuation route in need of repair and potential coordination for gate access/removal. Paving and vegetation maintenance.
Ponderosa Sky Ranch Roadside Thin	Roadside Mastication	Short-term	Ponderosa Sky Ranch	\$61,005	Ponderosa Sky Ranch	Remove gray pine and selectively masticate 75- 100'. Retain black oak.
Ponderosa Sky Ranch Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Ponderosa Sky Ranch	Unknown	Ponderosa Sky Ranch Roadside	Ponderosa Sky Ranch has been identified as needing additional fire lanes/secondary access roads for emergency evacuations.
Ponderosa Way Repaving and Vegetation Management Project	Roadway Improvement	Medium- term	Ponderosa Sky Ranch	\$100,000	Ponderosa Sky Ranch Way	This roadway is an evacuation route in need of repair. The road will undergo a pavement upgrade and vegetation maintenance.
Canyon View Loop Repaving and Vegetation Management Project	Roadway Improvement	Medium- term	Ponderosa Sky Ranch	\$100,000	Ponderosa Sky Ranch View	This roadway is an evacuation route in need of repair. The road will undergo a pavement upgrade and vegetation maintenance.

Rancho Tehama Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Rancho Tehama	Unknown	Rancho Tehama Roadside	Rancho Tehama has been identified as needing an additional secondary access road for emergency evacuations. Potential access routes to be analyzed: Boggs and Champlain Road, Black Ranch Road, Fawn Road, and Rancho Tehama Road. Extensive evaluation, private/public partnerships, project planning, and implementation would require a long-term process.
Rancho Tehama Road Intersection Widening Project	Intersection Improvement	Medium- term	Rancho Tehama	\$75,000	Rancho Tehama Road	The intersection at the entrance to Rancho Tehama and Stagecoach will be evaluated and improved for efficient and successful evacuation.
Gyle Road Improvement Project	Roadway	Medium- term	Rancho Tehama	\$100,000	Rancho Tehama Roadside	This previously unusable roadway during a natural event will be evaluated and improved for efficient and successful evacuation. Gyle and Dusty Rds. are the only way out to I-5 and both flood. There has been lots of road flooding and shoulders become soft with floods. The roadways will be further evaluated for flooding.

Rancho Tehama Road Improvement Project	Roadway Improvement	Medium- term	Rancho Tehama	\$100,000	Rancho Tehama Roadside	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Dusty Road Improvement Project	Roadway Improvement	Medium- term	Rancho Tehama	\$100,000	Dusty Road	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Tulare Road Improvement Project	Roadway Improvement	Medium- term	Rancho Tehama	\$100,000	Tulare Road	This roadway has been identified for roadway widening and clear zone expansion. The roadway will undergo construction to improve evacuation safety communitywide by creating roadways that are the proper width to support evacuees and emergency vehicles
Charles Drive Thinning	Roadside Brush Thinning	Short-term	Rancho Tehama	\$27,315	Rancho Tehama	Thin grey pine within 75 feet of road, reduce ladder fuels in rest of project area.
Paynes Creek Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Paynes Creek	Unknown	Paynes Creek Roadside	Paynes Creek has been identified as needing additional fire lanes/secondary access roads for emergency evacuations. Potential use of existing Forest Service and/or logging roads.

Rancho Tehama Park Thinning	Roadside Brush Thinning	Short-term	Rancho Tehama	\$22,620	Rancho Tehama	Remove gray pine within 75 feet of road. Reduce ladder fuels on remainder of project area.
Mineral Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Mineral	Unknown	Manton Roadside	Mineral has been identified as needing additional fire lanes/secondary access roads for emergency evacuations. Potential use of Forest Service roads and/or logging roads.
Rancho Tehama Roadside Thin	Roadside Brush Thinning	Short-term	Rancho Tehama	\$23,835	Rancho Tehama	Target gray pine, remove ladder fuels and jackpots.
Pebble Beach Unit	Roadside Brush Thinning	Short-term	Rancho Tehama	\$3,570	Pebble Beach Road	Target gray pine, remove ladder fuels and jackpots.
Government Gulch Thin	Roadside Brush Thinning	Short-term	Rancho Tehama	\$38,595	Government Gulch Road	Target gray pine, remove ladder fuels and jackpots.
Upper Stagecoach Roadside Thin	Roadside Brush Thinning	Short-term	Rancho Tehama	\$31,620	Upper Stagecoach Road	Target gray pine, remove ladder fuels and jackpots.
Hillcrest Roadside Thin	Roadside Brush Thinning	Short-term	Rancho Tehama	\$34,515	Hillcrest Road	Target gray pine, remove ladder fuels and jackpots.
Mill Creek Fire Lane/Emergency Personnel Secondary Access	Create New Fire Lane Emergency Secondary Access Route for Emergency Personnel	Long-term	Mill Creek	Unknown	Mill Creek Roadside	Mill Creek has been identified as needing additional fire lanes/secondary access roads for emergency evacuations. Potential use of existing Forest Service and/or logging roads.
Stagecoach Roadside Thin	Roadside Brush Thinning	Short-term	Rancho Tehama	\$28,560	Stagecoach Road	Target gray pine, remove ladder fuels and jackpots.
Oakridge Roadside Thin	Roadside Brush Thinning	Short-term	Rancho Tehama	\$22,980	Oakridge Road	Target gray pine, remove ladder fuels and jackpots.

Red Bank Road Improvement Project	Roadway	Medium- term	Red Bank	\$100,000	Red Bank Road	Red Bank Road has been identified for roadway widening and clear zone expansion. The roadway will undergo construction to improve evacuation safety communitywide by creating roadways that are the proper width to support evacuees and emergency vehicles
Jackson Street improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Jackson Street	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Southridge Drive improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Southridge Drive	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Jackson Street improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Jackson Street	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
McCoy Road improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	McCoy Road	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.

Reeds Creek Road improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Reeds Creek Road	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Kaer Avenue improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Kaer Avenue	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Antelope Boulevard, Main Street, Chestnut Avenue improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Multiple roads in Red Bluff	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Baker Road improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Baker Road	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Flores Avenue and 3rd Street improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Flores Avenue	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.
Flores Avenue improvements to make road traversable during an evacuation.	Roadway Improvement	Medium- term	Red Bluff	\$100,000	Flores Avenue	This roadway has previously been unusable during a natural event and will be evaluated and improved for efficient and successful evacuation.

Reeds Creek -	Roadway	Medium-	Red Bluff	\$100,000	Reeds Creek	This roadway
residence on	Improvement	term			at Aloha	has previously
Aloha Street -					Street	been unusable
improvements to						during a natural
make road						event and will be
traversable						evaluated and
during an						improved for
evacuation.						efficient and
						successful
						evacuation.

6.4 PLANNED CALTRANS PROJECTS

To the extent feasible, projects developed to support evacuation should be in conjunction with other planned projects. Similarly, other County projects and/or work efforts by other agencies should incorporate Tehama County evacuation needs and goals. Caltrans has several planned projects in Tehama County that directly or indirectly improve the roadway network and support evacuations. Exhibit 2 shows the projects and Table 6 provides a description of projects that are expected to benefit evacuations.

Table 6 - Planned Caltrans Projects in Tehama County

ROUTE	PROJECT NAME	DESCRIPTION	BENEFIT TO EVACUATION
I-5	Thomas Creek Bridge MTCE	Bridge Maintenance	Builds Resiliency into Primary Evacuation Route
I-5	Sacramento River Bridge Seismic	Bridge Retrofit	Builds Resiliency into Primary Evacuation Route
I-5	Tehama CRZ	Improve Clear Recovery Zone	Builds Resiliency into Primary Evacuation Route, reduces Fuel Loads
CA-32	Bridge Maintenance	Bridge Maintenance	Builds Resiliency into Primary Evacuation Route
I-5	Tehama 5 BBMMN	Install Broadband	Improves Real-time Communications
I-5	Satellite Dispatch EOC	Construct rural TMC	Improves Real-time Communications
I-5	Satellite Rural TMC	Construct rural TMC	Improves Real-time Communications
I-5	Cottonwood Toomes Access	Roadside Protect and Restore	Builds Resiliency into Primary Evacuation Route

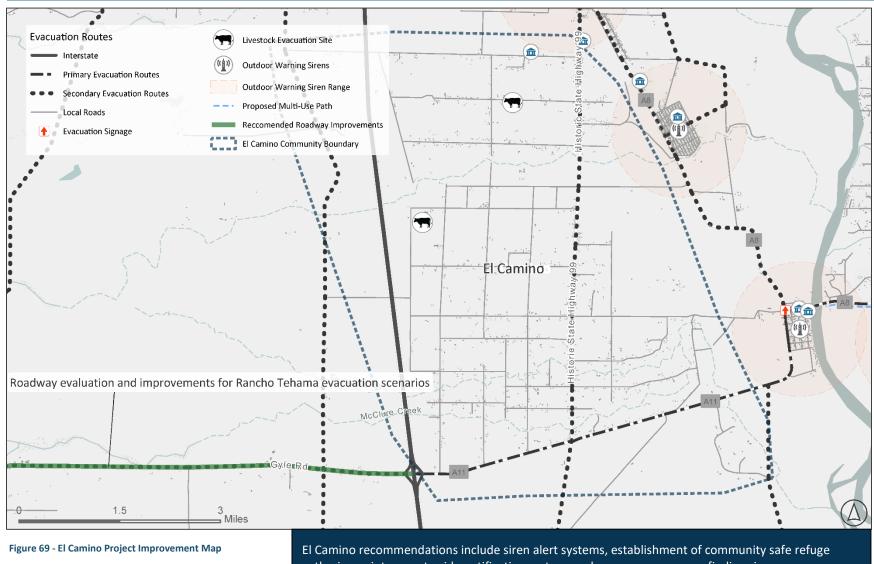
CA-99	Cottonwood Toomes Access	Roadside Protect and Restore	Builds Resiliency into Primary Evacuation Route
CA-36	Leftover Culvert	Culvert Replacement	Improve Drainage/ Builds Resiliency into Evacuation Route
CA-36	Horse Gulch Culvert	Curve improvement	Builds Resiliency into Evacuation Route
CA-36	Red Bluff Bridges	Bridge Seismic Restoration	Builds Resiliency into Evacuation Route
CA-36	Dibble Creek CAPM	Pavement Rehabilitation	Builds Resiliency into Evacuation Route
CA-99	VP2	Pavement Rehabilitation	Builds Resiliency into Evacuation Route
CA-99	South Ave Safety	Construct Roundabout	Intersection Improvements at potential pinch point
CA-99	Butler Slough Culverts	Culvert Rehabilitation	Improve Drainage/ Builds Resiliency into Evacuation Route
CA-36	Tehama Plumas Scour Mitigation	Bridge Scour Mitigation	Builds Resiliency into Evacuation Route

6.5 COMMUNITY IMPROVEMENT PROJECT MAPS

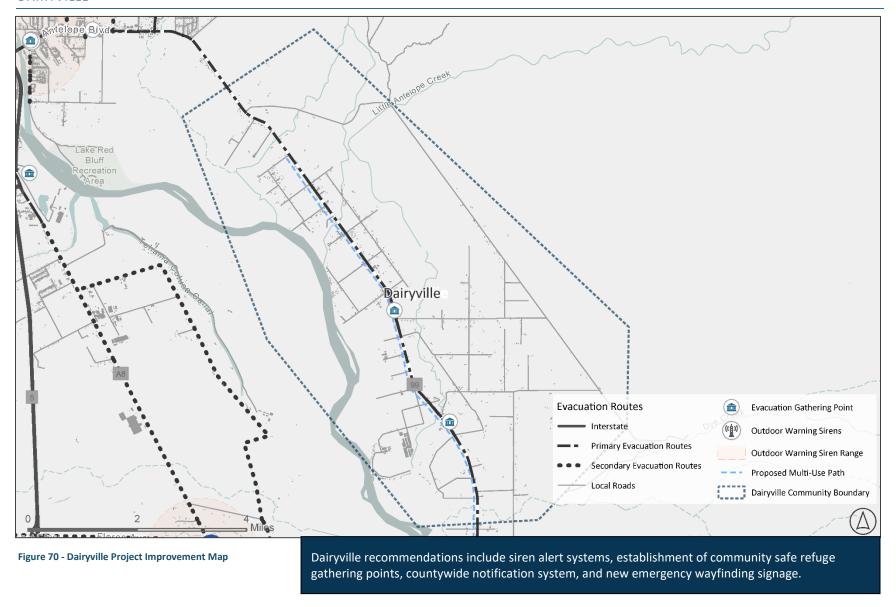
The following maps detail the proposed recommendations tailored to each community within Tehama County. These proposed enhancements encompass a broad spectrum of measures designed to bolster emergency preparedness and response capabilities. Specifically, they include strategic placements of emergency sirens to ensure optimal auditory coverage, new fire lane access corridors/secondary access routes for limited access communities, the designation of refuge areas as safe havens during emergencies for communities that do not already have this type of system in place, and the implementation of evacuation wayfinding solutions—comprising both locations and design schematics—to facilitate intuitive evacuation routes. Additionally, the documents outline targeted areas for roadside vegetation management through thinning and mastication practices, locations identified for controlled prescribed burns to reduce wildfire fuel loads, and a variety of road improvement projects aimed at enhancing evacuation route efficiency and safety.

Complementing these localized improvements, the report advocates for the deployment of policy and programming enhancements across the entire County. These include the initiation of comprehensive fire protection education programs designed to elevate community awareness and preparedness levels, alongside the development of sophisticated evacuation notification frameworks. These countywide initiatives are conceived to foster a culture of preparedness, ensuring that all residents of Tehama County are well-informed, ready to act in the event of an emergency, and equipped with the knowledge and tools necessary to protect themselves and their communities.

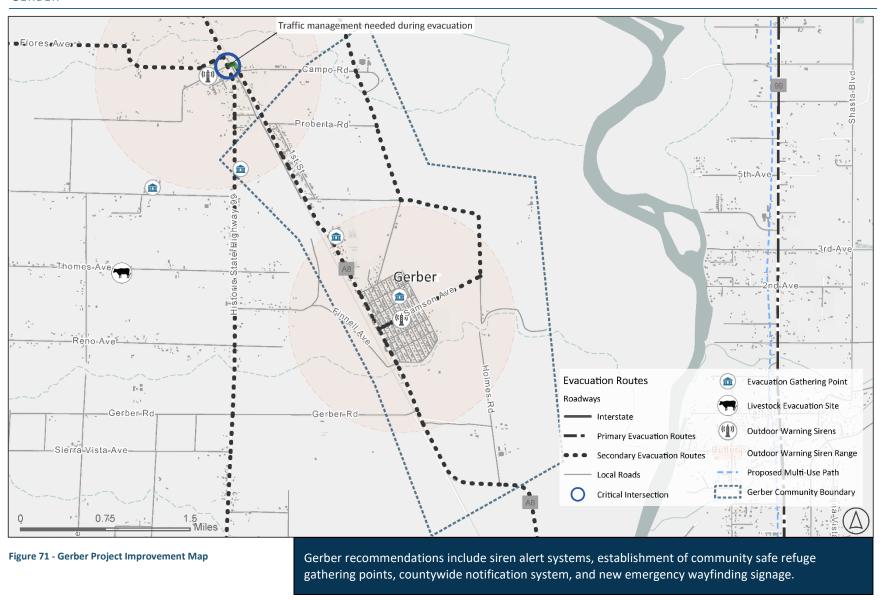
EL CAMINO

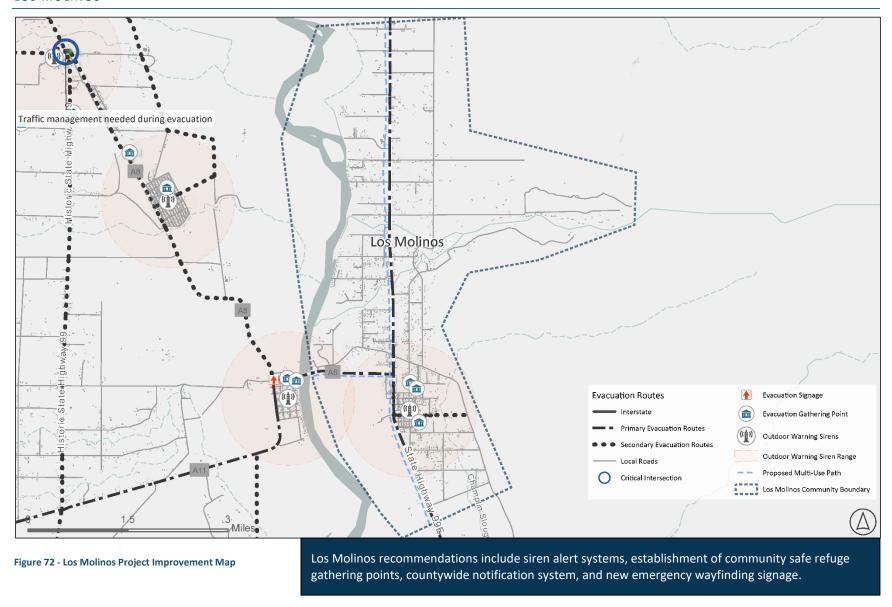


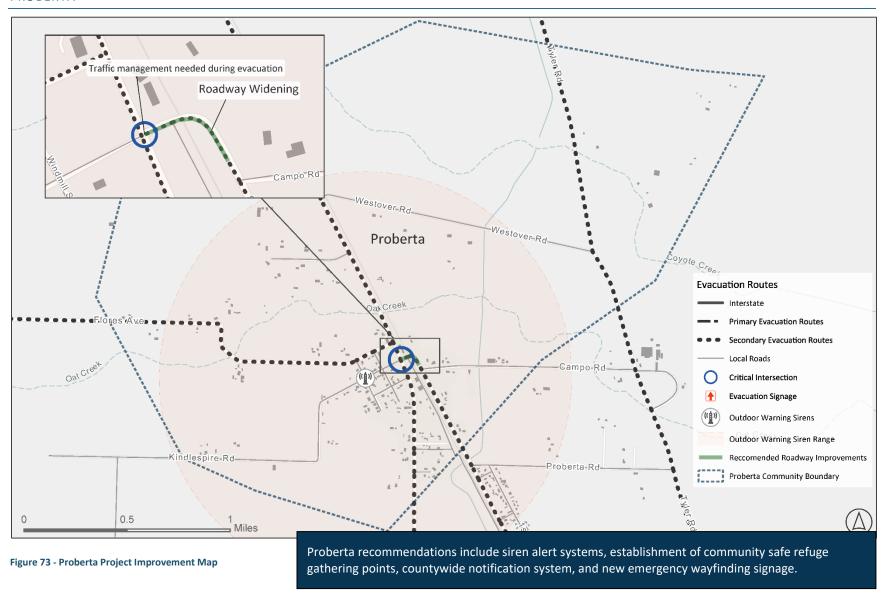
gathering points, countywide notification system, and new emergency wayfinding signage.

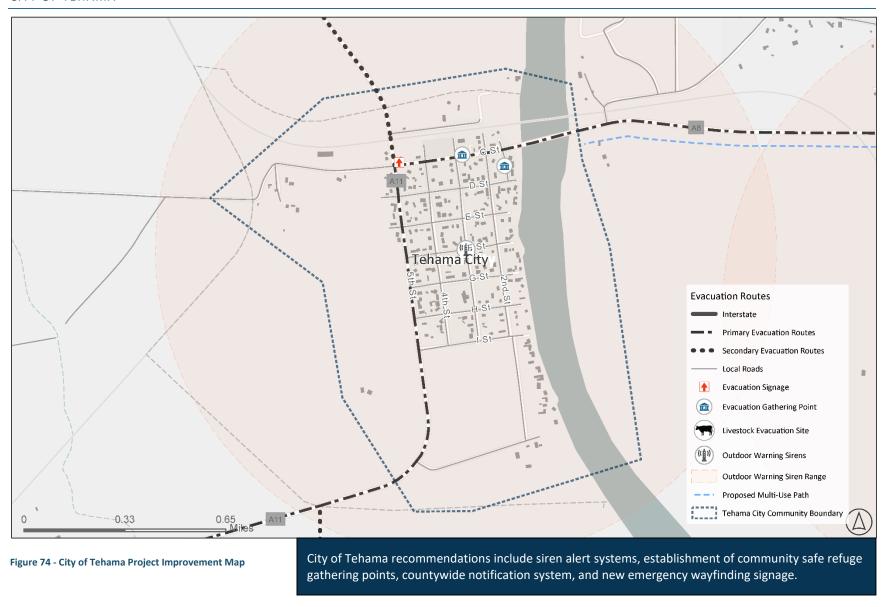


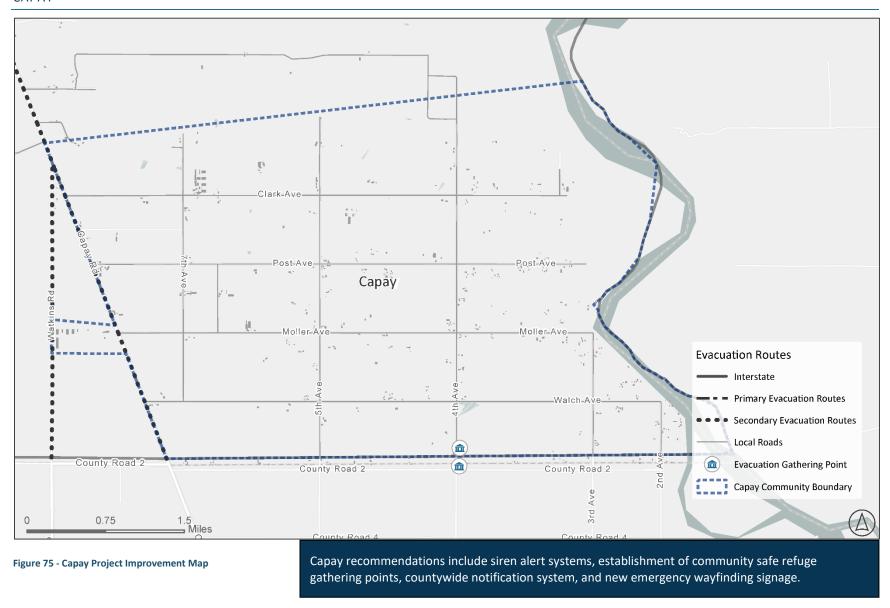
GERBER

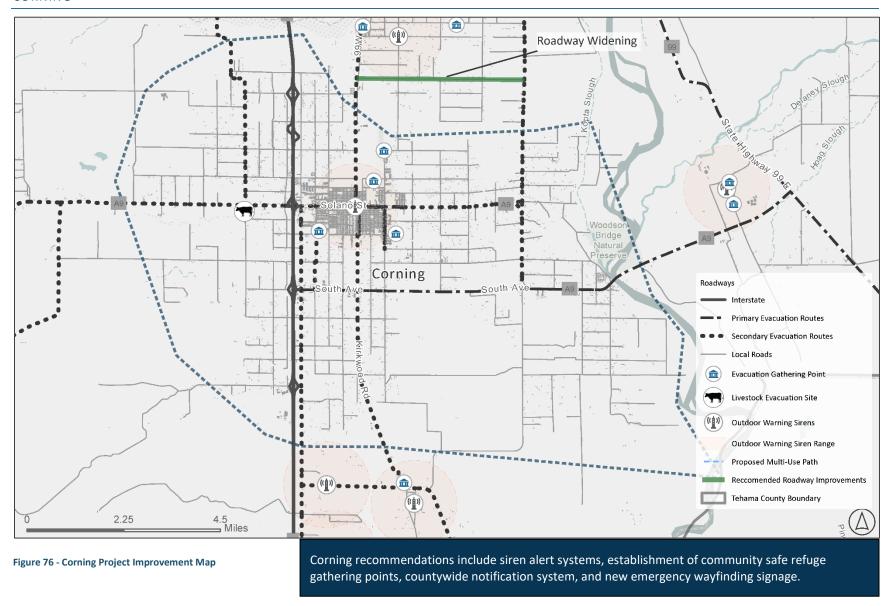


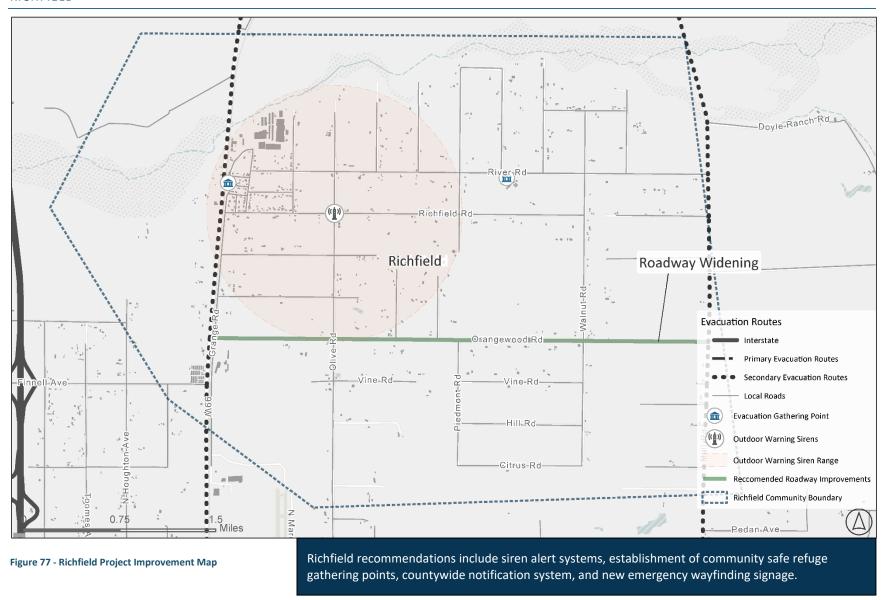


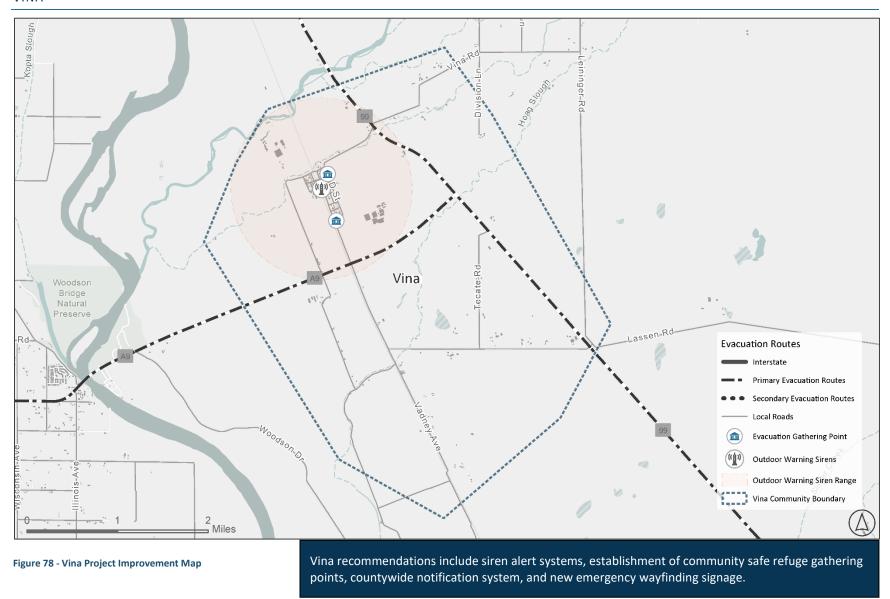


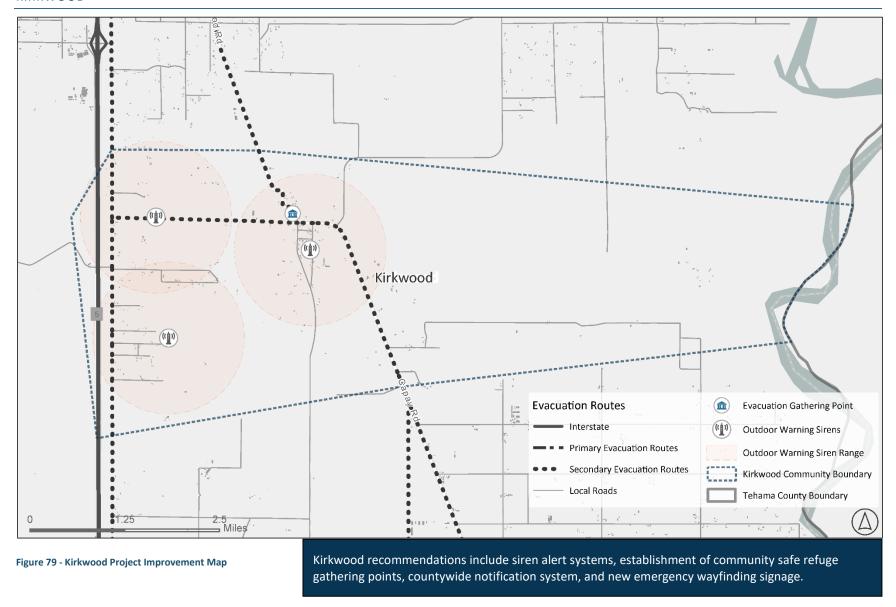


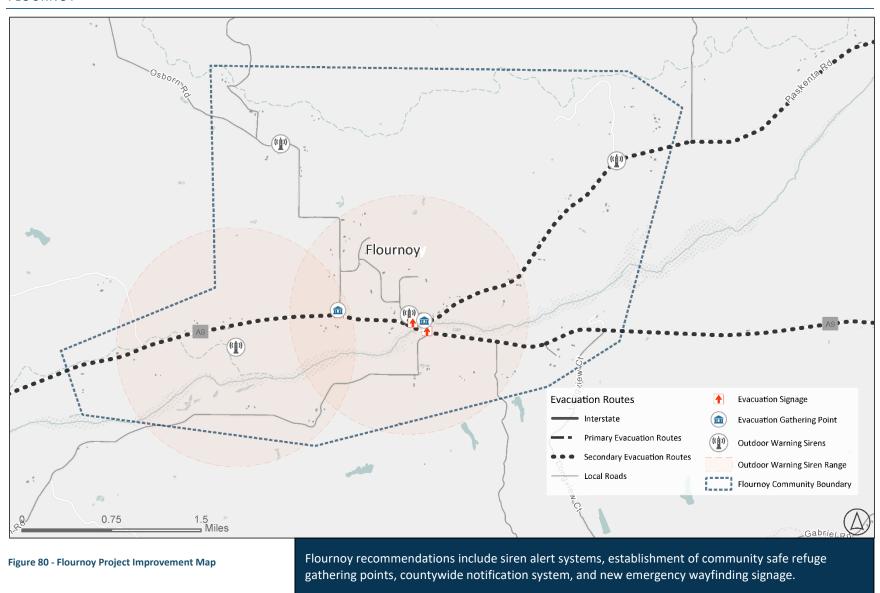


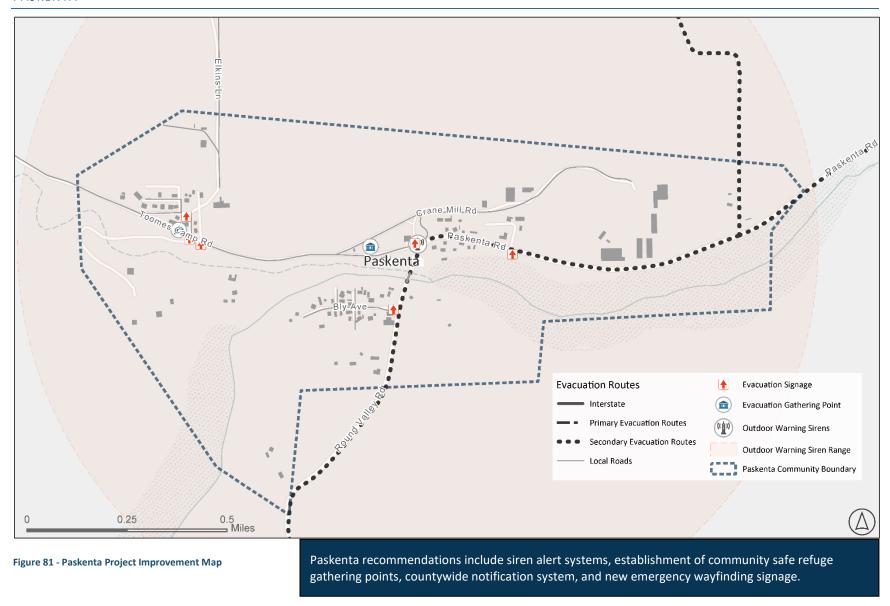


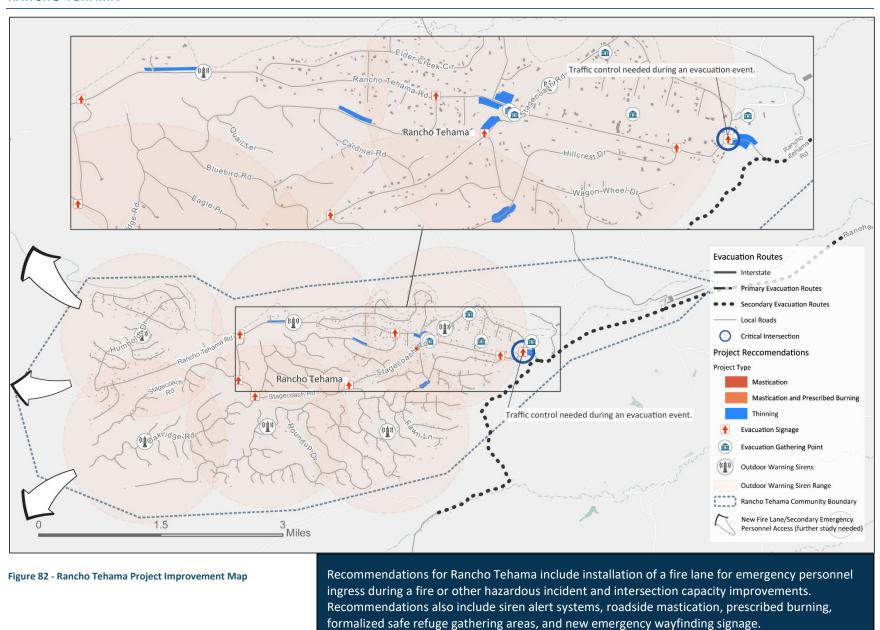


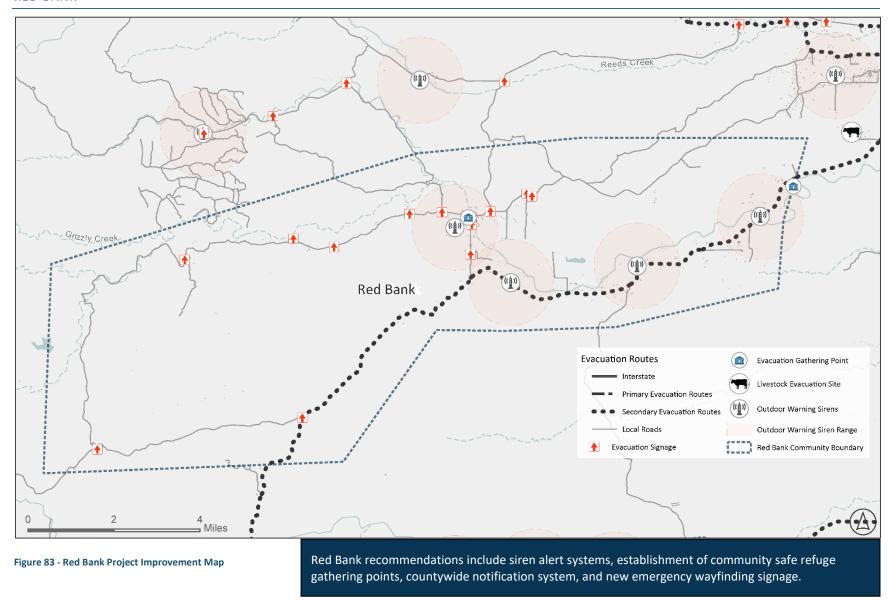


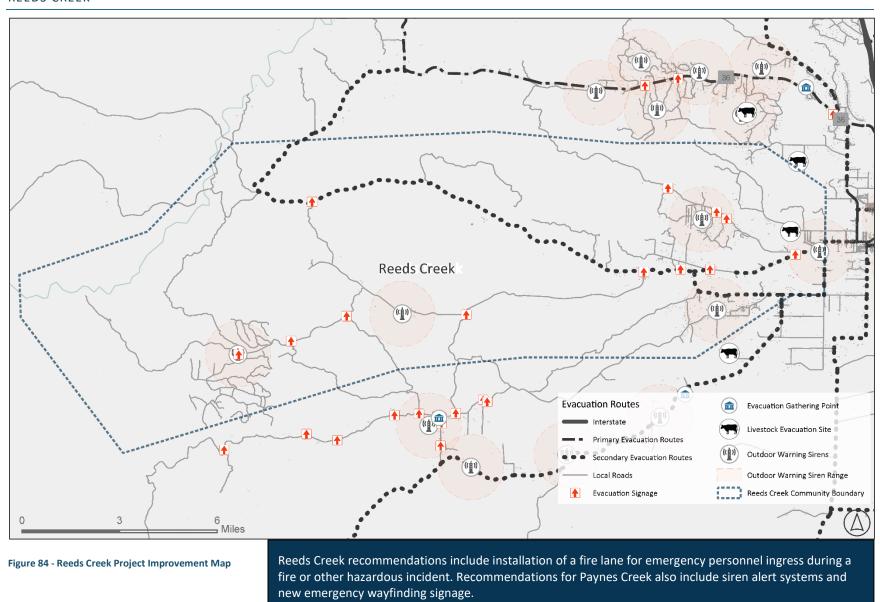


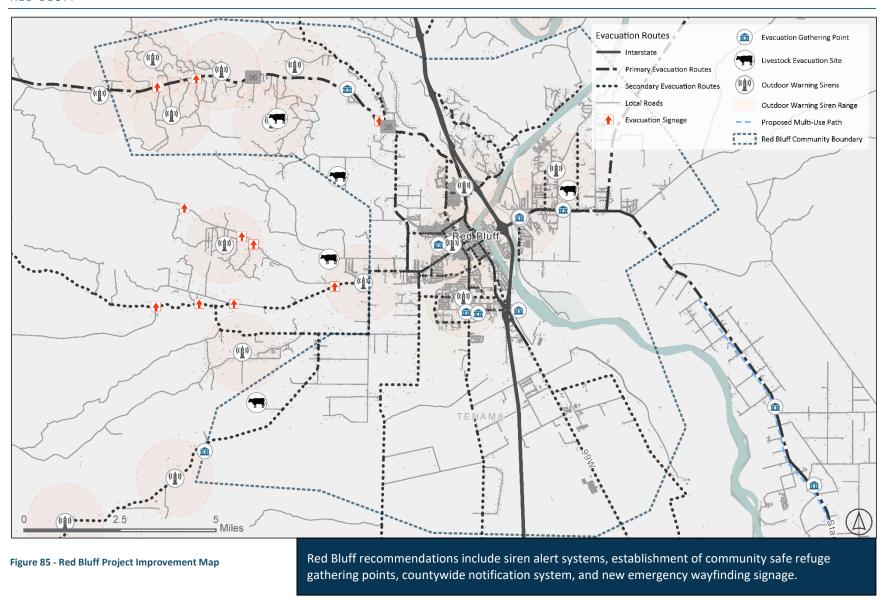




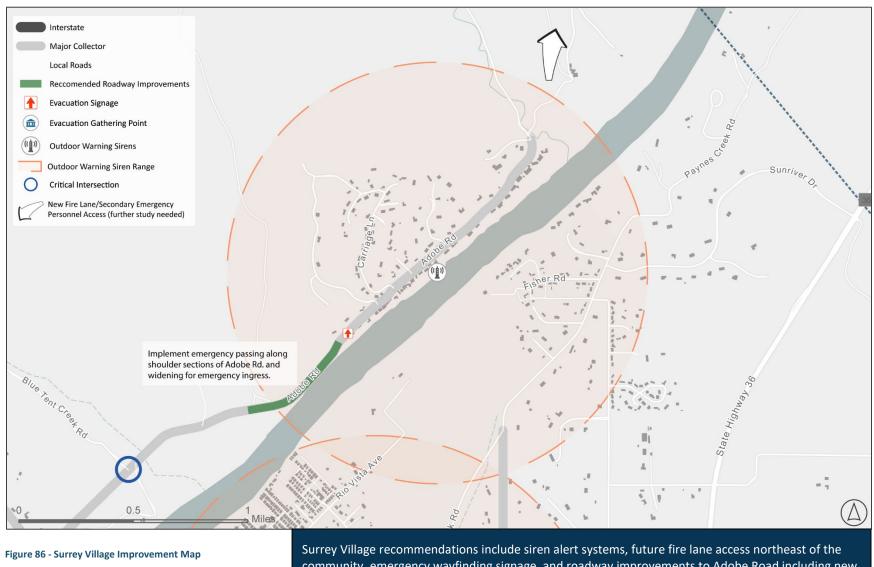




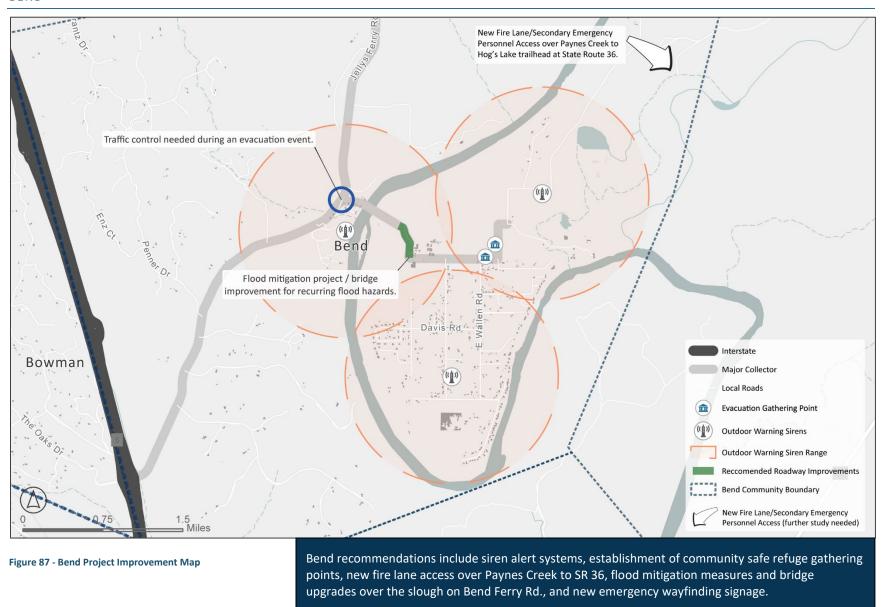


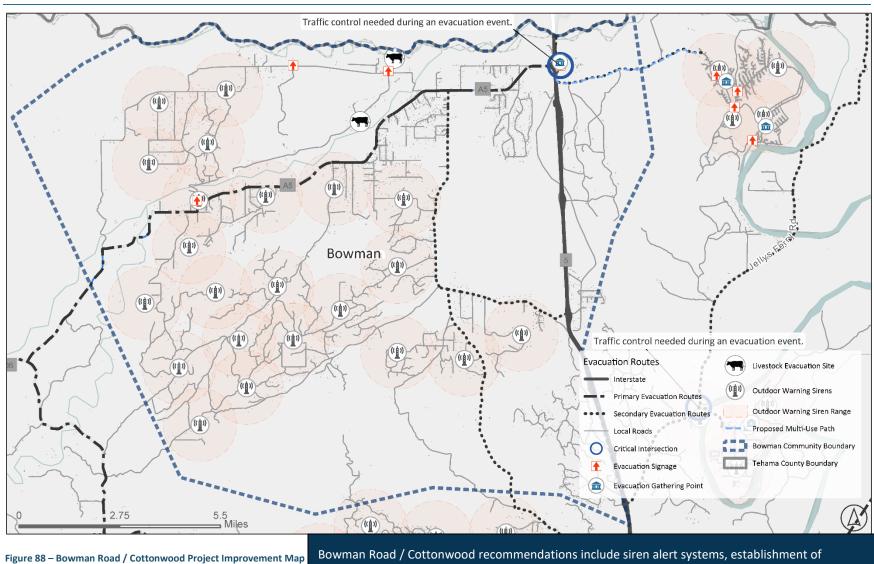


SURREY VILLAGE



Surrey Village recommendations include siren alert systems, future fire lane access northeast of the community, emergency wayfinding signage, and roadway improvements to Adobe Road including new passing sections along the shoulder for emergency ingress/egress.





community safe refuge gathering points, roadside mastication, and new emergency wayfinding signage.

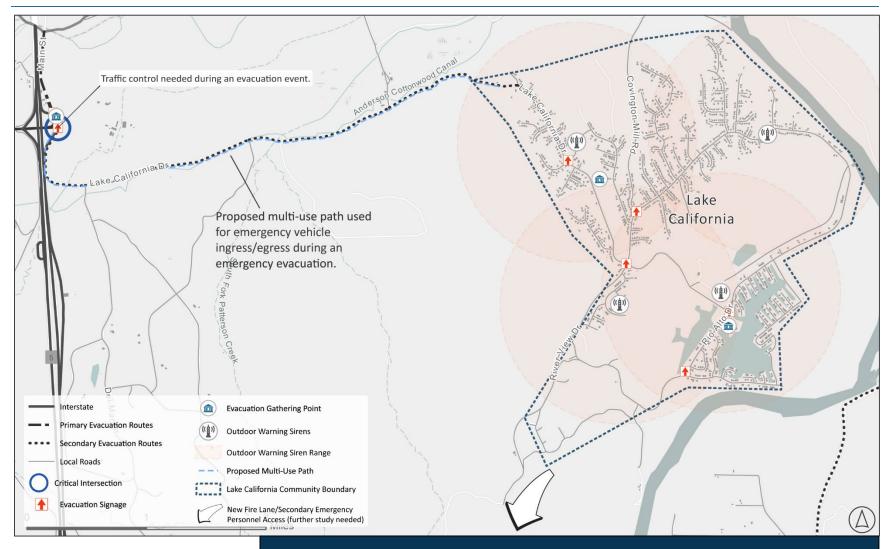


Figure 89 - Lake California Project Improvement Map

Lake California recommendations include a widening and repaving of Lake California Drive including a multiuse path for recreation and capacity increases during an emergency. Recommendations include installation of a fire lane for emergency personnel ingress during a fire or other hazardous incident. Recommendations for Lake California also include traffic control upgrades at the intersection of I-5, siren alert systems, and new emergency wayfinding signage.

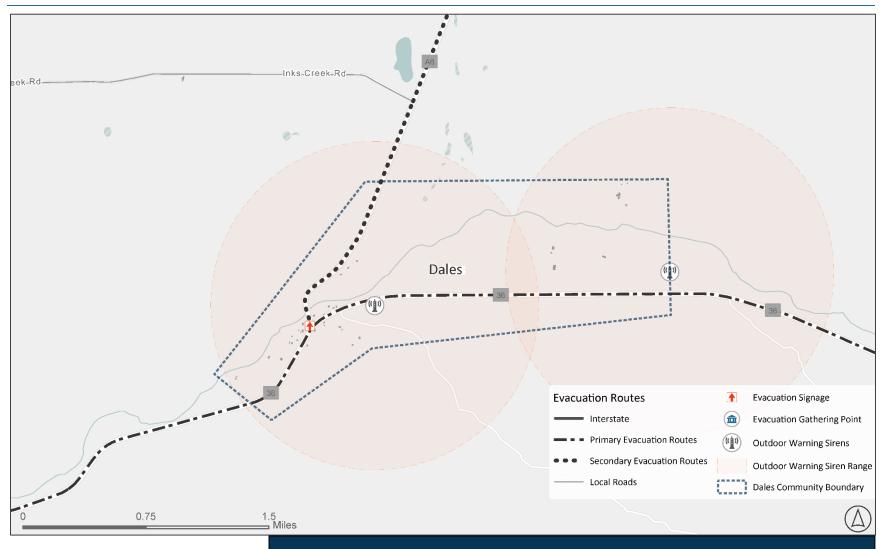


Figure 90 - Dales Project Improvement Map

Dales recommendations include siren alert systems, establishment of community safe refuge gathering points, and new emergency wayfinding signage.

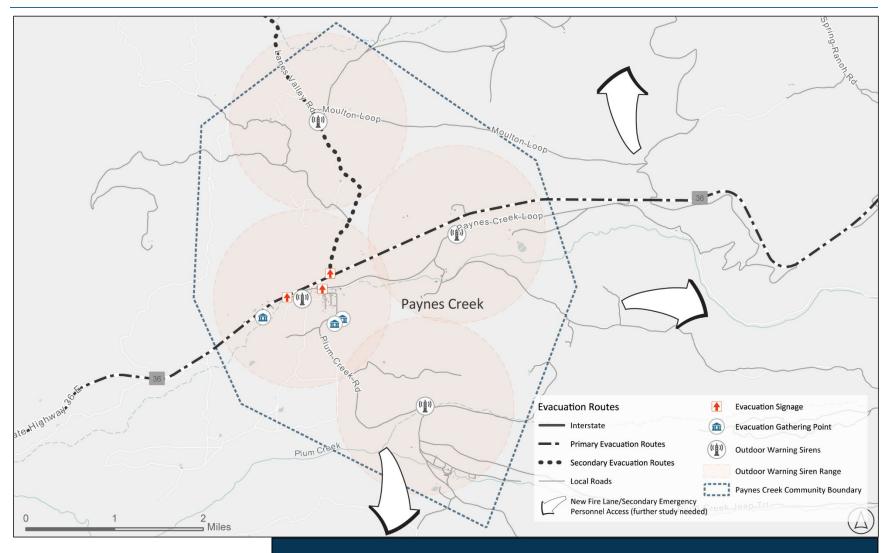
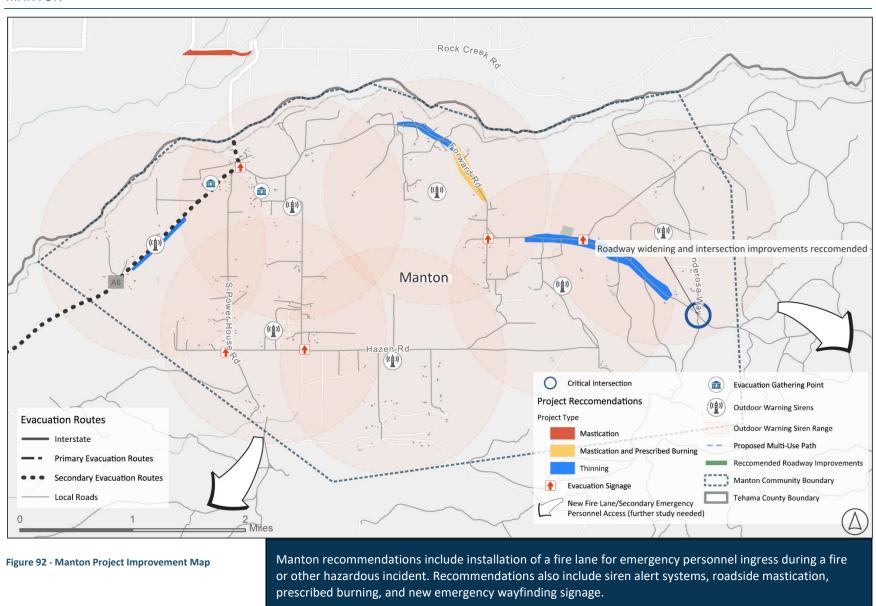
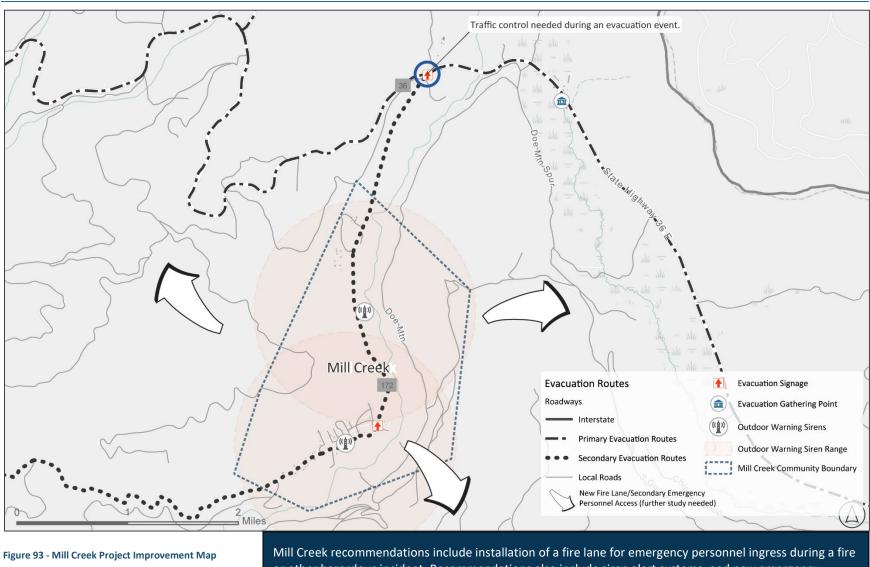


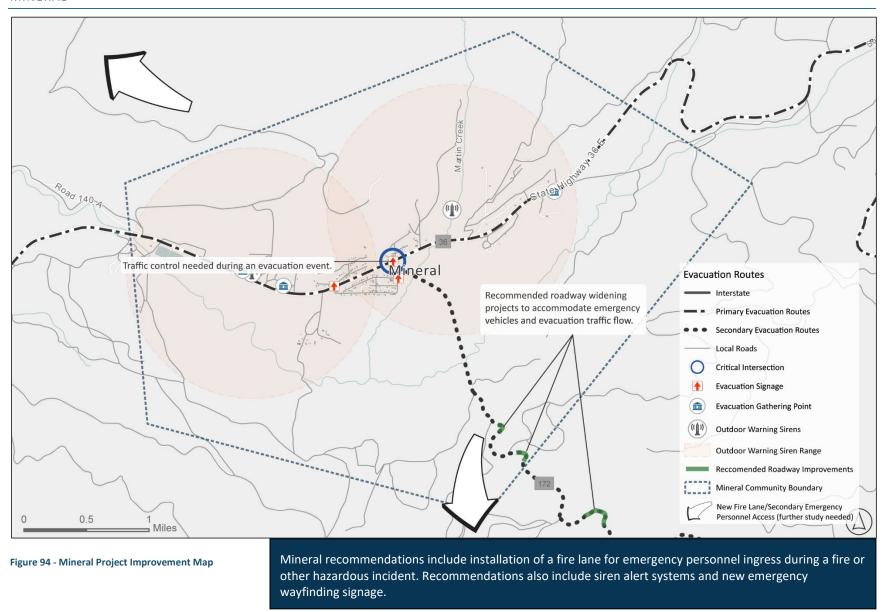
Figure 91 - Paynes Creek Project Improvement Map

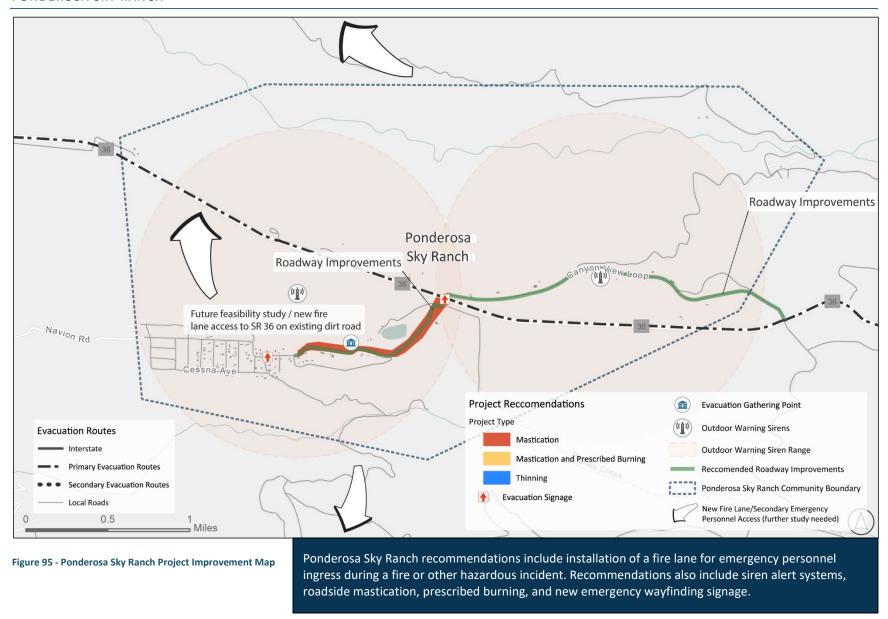
Paynes Creek recommendations include installation of a fire lane for emergency personnel ingress during a fire or other hazardous incident. Recommendations for Paynes Creek also include siren alert systems and new emergency wayfinding signage.





or other hazardous incident. Recommendations also include siren alert systems, and new emergency wayfinding signage.





7. COMMUNITY AND STAKEHOLDER PARTICIPATION

7.1 OUTREACH OVERVIEW

Prior to public engagement being conducted, the Tehama County Transportation Commission (TCTC) and the project team developed a Public Participation Plan (PPP). The PPP identifies and proposes methods of engagement and processes to achieve maximum participation through an inclusive and robust outreach effort.

Throughout the planning process of the Study, stakeholders and community members were encouraged and given the opportunity to participate in decision making processes, provide input and suggestions. Project updates were shared with stakeholders, project partners and community members to provide planning transparency and awareness of the Study's ongoing development. Engagement methods throughout the development of the Study included the following:

- Individual stakeholder contact
- Community workshops
- Pop-up community events
- **Board of Supervisor presentations**
- Project questionnaire
- Project website
- Informational flyers
- Social media outreach

Community engagement is indispensable in crafting a unified vision that accurately reflects the aspirations and requirements of Tehama County, its communities, and stakeholders. To this end, the project team embarked on a comprehensive community outreach initiative, aimed at discerning evacuation routing priorities. The insights and feedback obtained from community members and stakeholders were pivotal in identifying critical areas of concern, thereby shaping the development of the study's priority projects. Presented below is a table that encapsulates the outreach events conducted throughout the study's formulation, highlighting the concerted effort to integrate community perspectives into the strategic planning process.

Table 7 - Outreach Events

Tehama County Secondary Access & Routing Study			
Outreach Event Table			
Event Type	Location	Date	Time
Community Meeting	Paskenta	March 23, 2023	5:30-7:00 PM
Community Meeting	Cottonwood/Bowman	April 4, 2023	5:00 - 6:30 PM
Pop-Up	Tehama County District Fair	May 4 - May 7, 2023	4:00 - 8:00 PM, 12:00 - 8:00 PM
Community Meeting	Mineral	May 31, 2023	6:00 - 7:30 PM
Pop-Up	Manton Chili Cook-Off	June 10, 2023	10:00 AM - 3:00 PM
Community Meeting	Rancho Tehama	June 15, 2023	5:30 - 7:00 PM

Figure: Summary of Outreach Events

The community engagement received during the outreach phase aided in the development of the recommendations of this Study. The project team seamlessly integrated the County, community members and stakeholders in a transparent and collaborative process. The TCTC and project team were successful in producing an outreach strategy that provided plenty of opportunities for engaging and accessible community participation.

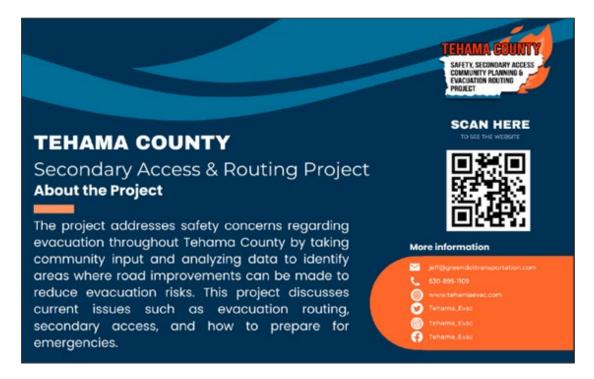


Figure 96 - Outreach Postcard



Figure 97 - Bowman Community Meeting

7.2 WEB-BASED OUTREACH

In an increasingly digital world, the TCTC and project team relied on web-based outreach to spread project information with County residents that could not attend in-person meetings. Social media is an important tool in facilitating online public engagement. The project team created project specific social media accounts and a website to promote the project, meeting information and the project survey. The facilitation of the survey online resulted in 40 responses alone.

The project website was created to specifically share the Study's information in a reliable and dedicated space. The project website can be found at www.tehamaevac.com/ and was used throughout the entirety of the project to distribute pertinent project information and collect community input.



Figure 98 - Study Website

7.3 PUBLIC QUESTIONNAIRE

A questionnaire was created for community members and stakeholders to gather information and facilitate participation in the development of the Study. The questionnaire was prepared in both physical and digital formats, including SurveyMonkey's user-friendly QR code and website integration directly connecting respondents to the online survey. The questions were intended to gauge residents travel behavior and evacuation safety concerns and consisted of eight questions. Physical copies of the questionnaire were also distributed at all inperson community meetings and pop-up events. Question 2 of the survey asked respondents to indicate their biggest evacuation concern. According to the questionnaire results, over 90% of respondents claimed fire was their biggest evacuation concern.

Q2 What is your biggest evacuation concern? Select all that apply

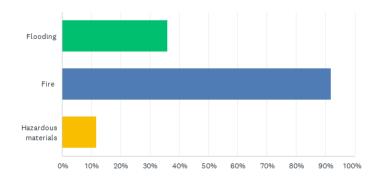


Figure 99 - Survey Response to Question #2

For the complete community survey results and tables, see Appendix C.

7.4 OUTREACH SUMMARY

The Tehama County Secondary Access and Routing Study signifies a critical initiative to bolster Tehama County against the perils of natural disasters, particularly wildfires, through comprehensive community resilience and safety strategies. The project, steered by the Tehama County Transportation Commission (TCTC), embraced a robust Public Participation Plan (PPP) to direct its outreach, ensuring widespread engagement and inclusivity throughout the study's development.

Diverse engagement strategies were harnessed to secure active involvement from stakeholders and community members, facilitating their contribution to the decision-making process and keeping them informed on the study's progress. These efforts included direct stakeholder engagement, community workshops, pop-up events, presentations to the Board of Supervisors, a project questionnaire, a dedicated project website, informational flyers, and proactive social media use. This comprehensive outreach strategy was pivotal in identifying evacuation routing priorities, where community and stakeholder feedback illuminated critical areas of concern, notably for communities restricted to a single evacuation route.

Upon the completion of the initial community engagement phase, the project team undertook a thorough compilation and analysis of all feedback received from community members and stakeholders. This process culminated in the creation of an Outreach Summary, which meticulously documented the concerns and suggestions raised, particularly emphasizing the apprehension surrounding communities with limited evacuation options. This summary not only informed the study's priority projects but also fostered a collective aspiration among Tehama County's communities and stakeholders for a more secure and prepared future.

The project's digital outreach strategies played a critical role in extending its reach, utilizing social media and a project-specific website to engage with residents unable to attend physical meetings. This digital presence provided a consistent and accessible information source, facilitating the dissemination of project updates and the collection of community feedback.

Additionally, a public questionnaire was developed and disseminated both online and in print, aiming to capture residents' travel habits, evacuation safety concerns, and primary fears regarding evacuation, with a significant emphasis on the risk of wildfires. This initiative further enriched the study's data collection and analysis, contributing to a comprehensive understanding of the community's needs and concerns.

The project team's strategic outreach implemented throughout the study not only enhanced its findings through community participation but also guaranteed that the planning process remained transparent, inclusive, and reflective of the community's inputs and concerns. The success of these outreach endeavors underscores the critical need for ongoing collaboration and dialogue as Tehama County advances in implementing the Secondary Access and Routing Study's recommendations, aiming to cultivate a safer and more resilient future for all residents.

For a complete list of comments and additional engagement see Appendix A.

Implementation and Funding

The Tehama County Safety, Secondary Access Community Planning & Evacuation Routing Study culminates in a comprehensive set of recommendations aimed at enhancing evacuation efficacy and community resilience amidst natural disasters. These recommendations are articulated through a multi-tiered strategy encompassing shortterm, medium-term, and long-term goals.

SHORT-TERM RECOMMENDATIONS:

Thinning and prescription burns along key roadside locations, establishing inter-agency communication protocols, implementing an evacuation signage project, and enhancing public awareness about evacuation management platforms.

MEDIUM-TERM RECOMMENDATIONS:

Involve evaluating and improving previously unusable roadways during natural events, prioritizing roadway improvement projects, and establishing shelters and safe refuge areas.

LONG-TERM RECOMMENDATIONS:

Include exploring and constructing new fire lane access/secondary access routes for communities with only one point of access, evaluating potential widening or improvement projects for roadways identified as potentially congesting during evacuations, and improving bridges on evacuation routes. This study identifies specific neighborhoods with only one ingress/egress point, highlighting their high fire hazard priority and underscoring the urgent need for secondary access routes to enhance safety and evacuation efficiency. These priority communities include Lake California, Rancho Tehama, Ponderosa Sky Ranch, and the Bend community.

Policies:

Policy Recommendations include enhanced road maintenance, designated well-maintained evacuation routes, yearly wildfire risk mapping, and improved communication infrastructure. These policies are vital for ensuring quick and safe evacuations whether due to natural disasters or man-made emergencies.

Emergency Preparedness Training, Collaboration and Communication:

Report findings underscore the importance of emergency preparedness training, involving hazard identification, risk assessment, evacuation procedures, and first aid. Community engagement, meetings and workshops, and the creation of outreach materials are pivotal to reinforcing knowledge and preparedness. Evacuation route maintenance is highlighted, with a focus on well-defined primary and secondary routes that consider traffic flow, accessibility, and proximity to vulnerable populations. Alternative routes are identified to ensure suitability for evacuation traffic, and a detailed analysis of all evacuation routes is recommended.

Public communication and alerts are crucial for maintaining clear communication channels throughout the evacuation process. The implementation of state-of-the-art emergency alert systems and solar-powered emergency sirens in vulnerable communities ensures comprehensive coverage throughout Tehama County. Additionally, this study calls for continuous improvement through after-action reviews, regular updates of evacuation and routing plans, and the establishment of feedback mechanisms. This approach ensures that the evacuation strategies remain effective and responsive to the specific wildfire risks faced by Tehama County.

Continued collaboration with CAL FIRE and the Tehama County Resource Conservation District is essential to implement these recommendations effectively. This partnership will ensure that the strategies for fire risk reduction, land use planning, and community education are aligned with state and local objectives for safety and sustainability.

TEHAMA COUNTY SAFETY, SECONDARY ACCESS, COMMUNITY PLANNING & EVACUATION PLANNING STUDY APPENDICES



PREPARED BY THE TEHAMA COUNTY TRANSPORTATION COMMISSION



IN PARTNERSHIP WITH









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Application	138

Appendix A



CAL FIRE Subdivision Survey Reports





Subdivision Survey Report

Part I: Site Information **Subdivision Information**

Noble Oaks **Subdivision Name: Subdivision ID:** 21-TGU-1C6F

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Noble Oaks



Address: 13880 Noble Oaks Drive City: Red Bluff

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Noble Oaks 21-TGU-1C6F

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed:	December 16, 2021
Estimated number of dwelling units Survey Results	56
Type(s) of vegetation within and around the	subdivision (check all that apply):
☑ Grass	☐ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the	
□ Canyon □ Mid-slope	☐ Chimneys☑ Slope Setback
☐ Saddle	☑ Ridge Top
☐ Flat Land	
<u>Comments</u> :	
Residential structure types identified (check	
☑ Single Family□ Townhomes	☐ Duplex☐ Apartments
☐ Mobile/Manufactured	☐ Other:
·	
<u>Comments:</u>	
Identified water source(s) availability (check	
☐ Hydrants☐ Private Water Tanks	□ Draft Hydrants☑ No Water Source
☐ Wharf Hydrant	
<u>Comments:</u>	

Noble Oaks 21-TGU-1C6F

Access and Evacuation

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,00 standard of the primary road? (14 CCR 1267.01(a to be rated to carry the same quantity of traffic (e.g., a two-lane).	a)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that direct primary road or results in a circular traffic flow (267.01(a)(ii))	
☑ Yes	□ No	
<u>Comments:</u>		
Fire access only with locked gate		

Noble Oaks 21-TGU-1C6F

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Subdivision Survey Report

Part I: Site Information
Subdivision Information

John Berglund

Subdivision Name:Pleasant ValleySubdivision ID:21-TGU-2B66

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Pleasant Valley



Address: 14800 Pleasant Valley Drive City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Pleasant Valley 21-TGU-2B66

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed:	December 16, 2021
Estimated number of dwelling units Survey Results	36
Type(s) of vegetation within and around the su	bdivision (check all that apply):
☑ Grass	☐ Brush
✓ Trees	☐ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the su	
☐ Canyon	☑ Chimneys☑ Slope Setback
☑ Mid-slope□ Saddle	☑ Slope Setback ☑ Ridge Top
☐ Flat Land	agaap
<u>Comments</u> :	
Residential structure types identified (check al	
☑ Single Family□ Townhomes	□ Duplex□ Apartments
☐ Mobile/Manufactured	☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check al ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	I l that apply): □ Draft Hydrants ☑ No Water Source
Comments:	

Pleasant Valley 21-TGU-2B66

Access and Evacuation

Is there a secondary egress ro 1267.01(a)(i)(ii))	oute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction	navigable by a passenger vehicle weighing 6,000 pstandard of the primary road? (14 CCR 1267.01(a)(to be rated to carry the same quantity of traffic (e.g., a two-lane part).	i))
□ Yes	☑ No	
	ked gates or limited access; or a road that directs to primary road or results in a circular traffic flow, to 267.01(a)(ii))	
□ Yes	☑ No	
Comments:		

Pleasant Valley 21-TGU-2B66

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills. ☐ Install reflective markers to indicate road edges or other areas of danger that might

Comments:

not be evident during periods of low visibility.



Subdivision Survey Report

Part I: Site Information
Subdivision Information

John Berglund

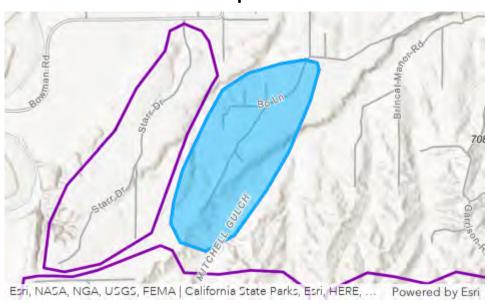
Subdivision Name: Bo

Subdivision ID: 21-TGU-3DA4

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Bo



Address: 16680 Bo Lane City: Cottonwood

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Bo 21-TGU-3DA4

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed: Estimated number of dwelling units	January 3, 2022 32
Survey Results	<u> </u>
Type(s) of vegetation within and around the s Grass	subdivision (check all that apply): ☑ Brush
☑ Trees	☐ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	subdivision (check all that apply): ☑ Chimneys □ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a ☑ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): □ Draft Hydrants □ No Water Source
<u>Comments:</u>	

Bo 21-TGU-3DA4

Access and Evacuation

Is there a secondary egress r 1267.01(a)(i)(ii))	oute in the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction	e navigable by a passenger vehicle weighing 6,000 pound standard of the primary road? (14 CCR 1267.01(a)(i)) e to be rated to carry the same quantity of traffic (e.g., a two-lane paved roae).
□ Yes	☑ No
	cked gates or limited access; or a road that directs traffice e primary road or results in a circular traffic flow, to the .267.01(a)(ii))
□ Yes	☑ No
Comments:	

Bo 21-TGU-3DA4

Part III: Recommendations Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision.
\square Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
□ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
$\ \square$ When side street parking narrows the road to a smaller width than the standards in 14 CCR \S 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information **Subdivision Information**

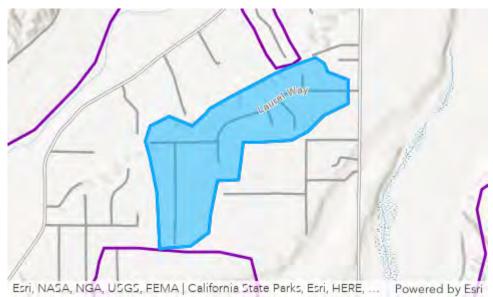
Laurel **Subdivision Name:**

Subdivision ID: 21-TGU-6B9C

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> **SRA** Very High

> > Map: Laurel



Address: 19070 Laurel Way City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Laurel 21-TGU-6B9C

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	December 15, 2021 123
Type(s) of vegetation within and around the s ☑ Grass	ubdivision (check all that apply): ☑ Brush
☑ Trees	☐ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	ubdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): Duplex Apartments Other:
<u>Comments:</u>	
Identified water source(s) availability (check a ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Laurel 21-TGU-6B9C

Is there a secondary egress ro 1267.01(a)(i)(ii))	oute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro).	
□ Yes	☑ No	
	ked gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Laurel 21-TGU-6B9C

Part III: Recommendations

Comments:

Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision.
\square Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
□ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
\square When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
oxdot Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.



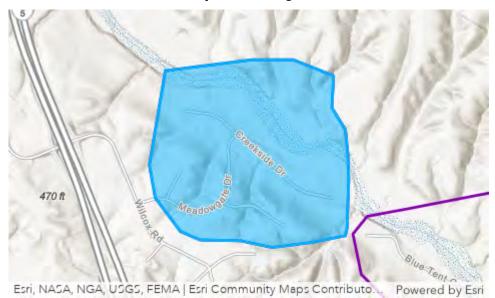
Part I: Site Information **Subdivision Information**

Meadowgate **Subdivision Name: Subdivision ID:** 21-TGU-7C9F

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Meadowgate



Address: 21195 Meadowgate Drive City: Red Bluff

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Meadowgate 21-TGU-7C9F

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 9, 2021 45
Survey Results	
Type(s) of vegetation within and around the s ☑ Grass	subdivision (check all that apply): ☐ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a ☑ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): □ Duplex □ Apartments □ Other:
<u>Comments:</u>	
Identified water source(s) availability (check of the Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Meadowgate 21-TGU-7C9F

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Meadowgate 21-TGU-7C9F

Part III: Recommendations

Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision.
\square Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
□ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
\square When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
oxdot Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.
Comments:
1 residence only has access by crossing a creek utilizing a low water crossing.



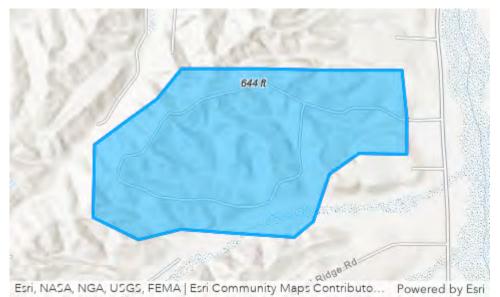
Part I: Site Information **Subdivision Information**

Saddleback Ridge **Subdivision Name: Subdivision ID:** 21-TGU-7D22

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Saddleback Ridge



Address: 18920 Saddleback Ridge Road City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Saddleback Ridge 21-TGU-7D22

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	December 15, 2021 57
Type(s) of vegetation within and around the su	bdivision (check all that apply):
☑ Grass	☑ Brush
☑ Trees	☐ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the su ☐ Canyon ☐ Mid-slope	bdivision (check all that apply): ☑ Chimneys ☑ Slope Setback
☑ Saddle☑ Flat Land	☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check all	
☑ Single Family☐ Townhomes	□ Duplex
☐ Mobile/Manufactured	□ Apartments□ Other:
<u>Comments:</u>	
Identified water source(s) availability (check al ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	I that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Saddleback Ridge 21-TGU-7D22

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,0 standard of the primary road? (14 CCR 1267.01 to be rated to carry the same quantity of traffic (e.g., a two-land).	L(a)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that dire primary road or results in a circular traffic flo 267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Saddleback Ridge 21-TGU-7D22

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



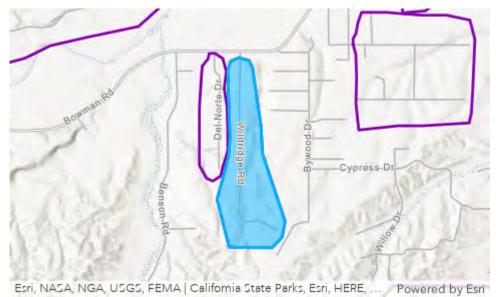
Part I: Site Information **Subdivision Information**

Wildridge Road **Subdivision Name: Subdivision ID:** 21-TGU-8E58

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Wildridge Road



City: Cottonwood Address: 18616 Wildridge Road

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Wildridge Road 21-TGU-8E58

Part II: Site Information and Fire Survey

Date Surveyed:	December 15, 2021
Estimated number of dwelling units	61
Survey Results	
Type(s) of vegetation within and around the su ☐ Grass	☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the su ☐ Canyon	☐ Chimneys
☐ Mid-slope☑ Saddle☑ Flat Land	☑ Slope Setback☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a	ll that apply):
☑ Single Family	□ Duplex
☐ Townhomes☐ Mobile/Manufactured	☐ Apartments☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check a ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	II that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Wildridge Road 21-TGU-8E58

Is there a secondary egress route in (1267.01(a)(i)(ii))	the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction standar	ble by a passenger vehicle weighing 6,000 pounds rd of the primary road? (14 CCR 1267.01(a)(i)) ed to carry the same quantity of traffic (e.g., a two-lane paved road
□ Yes	☑ No
	tes or limited access; or a road that directs traffic ry road or results in a circular traffic flow, to the (a)(ii))
□ Yes	☑ No
<u>Comments:</u>	

Wildridge Road 21-TGU-8E58

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☐ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

Comments:

☑ Conduct community-wide evacuations drills.

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information
Subdivision Information

Subdivision Name: Oak Knoll

Subdivision ID: 21-TGU-9EB4

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Oak Knoll



Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributo... Powered by Esri

Address: 14935 Oak Knoll Drive City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Oak Knoll 21-TGU-9EB4

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 16, 2021 89
Survey Results	
Type(s) of vegetation within and around the sub ☐ Grass	odivision (check all that apply): Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the sub ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	odivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
☐ Townhomes	that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check all Hydrants Private Water Tanks Wharf Hydrant	that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Oak Knoll 21-TGU-9EB4

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Oak Knoll 21-TGU-9EB4

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. □ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills. ☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information **Subdivision Information**

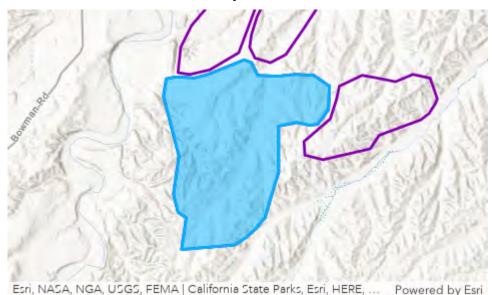
View **Subdivision Name:**

Subdivision ID: 21-TGU-23BD

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> **SRA** Very High

> > Map: View



Address: 16815 View Drive City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

View 21-TGU-23BD

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 27, 2021 68
Survey Results Type(s) of vegetation within and around the su	ubdivision (check all that apply):
☑ Grass	☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the su ☐ Canyon ☑ Mid-slope ☑ Saddle	ubdivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
☐ Flat Land	El Mage Top
<u>Comments</u> :	
Residential structure types identified (check a	ll that apply):
☑ Single Family	□ Duplex
☐ Townhomes☐ Mobile/Manufactured	☐ Apartments☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check a ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	Il that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

View 21-TGU-23BD

Is there a secondary egress route in 1267.01(a)(i)(ii))	the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction standar	able by a passenger vehicle weighing 6,000 pounds rd of the primary road? (14 CCR 1267.01(a)(i)) red to carry the same quantity of traffic (e.g., a two-lane paved road
□ Yes	☑ No
	tes or limited access; or a road that directs traffic ry road or results in a circular traffic flow, to the (a)(ii))
□ Yes	☑ No
<u>Comments:</u>	

View 21-TGU-23BD

Part III: Recommendations

Comments:

Access and Evacuation Recommendations (check all that apply):

√	Create a secondary access to the subdivision.
	Make improvements to the existing secondary access to the subdivision.
CC	Install reflective addressing signs for structures and roads in conformance with 14 CR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California de of Regulations, title 24, part 9.
ro Hi	Install reflective evacuation route street signs directing residents from their local ads to the nearest collector road(s) and/or arterial highway(s) (see California ghway Design manual for definitions), based on the standards for emergency anagement signing in the California Manual on Uniform Traffic Control Devices
re	Where additional routes may exist, but with a gate that does not conform to the quirements in 14 CCR § 1273.09, recommend that gates (including private gates) main unlocked during red flag warnings or high fire danger conditions.
14	When side street parking narrows the road to a smaller width than the standards in CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit reet parking so a wider pathway is available to support rapid evacuation.
	Conduct community-wide evacuations drills.
	Install reflective markers to indicate road edges or other areas of danger that might t be evident during periods of low visibility.



Part I: Site Information
Subdivision Information

John Berglund

Subdivision Name:Rancho TehamaSubdivision ID:21-TGU-31FE

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Rancho Tehama



Esri, NASA, NGA, USGS | California State Parks, Esri, HERE, Garmin,... Powered by Esri

Address: 17615 Rancho Tehama Road City: Corning

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Rancho Tehama 21-TGU-31FE

Part II: Site Information and Fire Survey

Date Surveyed:	December 28, 2021
Estimated number of dwelling units	990
Survey Results	
Type(s) of vegetation within and around the s ☑ Grass	Subdivision (check all that apply): ☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the s	
□ Canyon☑ Mid-slope	☑ Chimneys☑ Slope Setback
☑ Mid-slope ☑ Saddle	☑ Ridge Top
☑ Flat Land	_ mage rop
Comments:	
Residential structure types identified (check	
☑ Single Family	□ Duplex
☐ Townhomes☐ Mobile/Manufactured	☐ Apartments☐ Other:
□ Mobile/Manufactured	□ Other:
<u>Comments:</u>	
Identified water source(s) availability (check	all that apply):
☐ Hydrants	☑ Draft Hydrants
☑ Private Water Tanks□ Wharf Hydrant	☐ No Water Source
<u>Comments:</u> Some hydrants have run dry off there s	supply of water.

Rancho Tehama 21-TGU-31FE

Is there a secondary egress route in the subdivision? (PRC 4290.5, 14 CCR 1267.01(a)(i)(ii))		
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,0 standard of the primary road? (14 CCR 1267.01 to be rated to carry the same quantity of traffic (e.g., a two-la).	L(a)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that dire primary road or results in a circular traffic flo 267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Rancho Tehama 21-TGU-31FE

Part III: Recommendations

Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision.
$\hfill \square$ Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
\Box Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
☑ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
$\ensuremath{\square}$ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.
Comments:
Some homes have reflective addresses most do not.



Part I: Site Information **Subdivision Information**

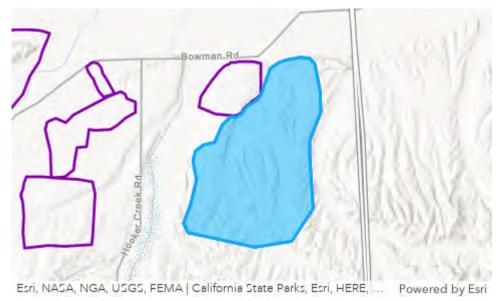
Adams **Subdivision Name:**

Subdivision ID: 21-TGU-53DC

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

> > Map: Adams



Address: 19460 Adams Road City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Adams 21-TGU-53DC

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	December 15, 2021 223
Type(s) of vegetation within and around the s ☑ Grass	ubdivision (check all that apply): ☑ Brush
☑ Trees	□ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	ubdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a ☑ Single Family □ Townhomes □ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check a Hydrants Private Water Tanks Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Adams 21-TGU-53DC

Is there a secondary egress route in the subdivision? (PRC 4290.5, 14 CCR 1267.01(a)(i)(ii))		
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,0 standard of the primary road? (14 CCR 1267.01 to be rated to carry the same quantity of traffic (e.g., a two-la).	L(a)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that dire primary road or results in a circular traffic flo 267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Adams 21-TGU-53DC

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. □ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



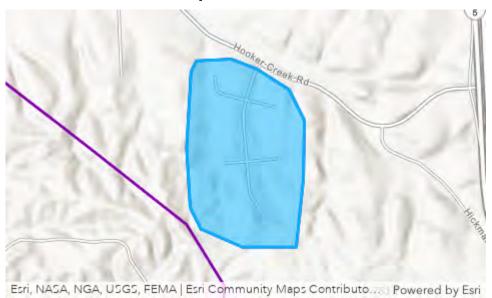
Part I: Site Information **Subdivision Information**

North Granite **Subdivision Name: Subdivision ID:** 21-TGU-62AE

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: North Granite



Address: 17195 North Granite Drive City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

North Granite 21-TGU-62AE

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 15, 2021 33
Survey Results	
Type(s) of vegetation within and around the ☐ Grass	subdivision (check all that apply): ☑ Brush
☑ Trees	□ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
Comments:	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

North Granite 21-TGU-62AE

Is there a secondary egress route in the subdivision? (PRC 4290.5, 14 CCR 1267.01(a)(i)(ii))		
□ Yes	☑ No	
or less, of equal construction stand	gable by a passenger vehicle weighing 6,000 lard of the primary road? (14 CCR 1267.01(a) rated to carry the same quantity of traffic (e.g., a two-lane page)	(i))
□ Yes	☑ No	
_	gates or limited access; or a road that directs nary road or results in a circular traffic flow, to 11(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

North Granite 21-TGU-62AE

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. □ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. □ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information
Subdivision Information

John Berglund

Subdivision Name: Via Del Roble **Subdivision ID:** 21-TGU-72A5

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Via Del Roble



Address: 4090 Via Del Roble City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Via Del Roble 21-TGU-72A5

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 16, 2021 58
Survey Results	
Type(s) of vegetation within and around the ☐ Grass	subdivision (check all that apply): ☐ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): □ Duplex □ Apartments □ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Via Del Roble 21-TGU-72A5

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Via Del Roble 21-TGU-72A5

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills. ☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Page 4 of 4

Comments:



Part I: Site Information **Subdivision Information**

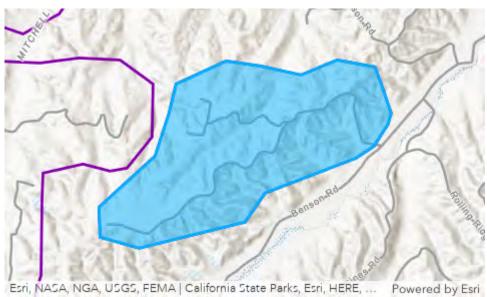
Prentice **Subdivision Name:**

Subdivision ID: 21-TGU-75F5

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

> > Map: Prentice



Address: 17210 Prentice Road City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Prentice 21-TGU-75F5

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 27, 2021 41
Survey Results	
Type(s) of vegetation within and around the s ☑ Grass	subdivision (check all that apply): ☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	Subdivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
Comments:	
Residential structure types identified (check a Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): □ Duplex □ Apartments □ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Prentice 21-TGU-75F5

Is there a secondary egress (1267.01(a)(i)(ii))	route in the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction	e navigable by a passenger vehicle weighing 6,000 pound a standard of the primary road? (14 CCR 1267.01(a)(i)) we to be rated to carry the same quantity of traffic (e.g., a two-lane paved roadle).
□ Yes	☑ No
	cked gates or limited access; or a road that directs traffic ne primary road or results in a circular traffic flow, to the 1267.01(a)(ii))
□ Yes	☑ No
<u>Comments:</u>	

Prentice 21-TGU-75F5

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information **Subdivision Information**

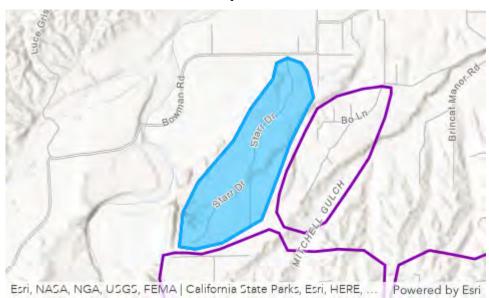
Starr **Subdivision Name:**

Subdivision ID: 21-TGU-227A

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> **SRA** Very High

> > Map: Starr



Address: 18229 Starr Road City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Starr 21-TGU-227A

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	January 3, 2022 32
Type(s) of vegetation within and around the s ☑ Grass	ubdivision (check all that apply): ☑ Brush
☑ Trees	□ Timber
□ Other:	
Comments:	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	ubdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
Comments:	
Residential structure types identified (check a Single Family Townhomes Mobile/Manufactured Comments:	all that apply): Duplex Apartments Other:
Identified water source(s) availability (check a Hydrants Private Water Tanks Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
Comments:	

Starr 21-TGU-227A

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Starr 21-TGU-227A

Part III: Recommendations Access and Evacuation Recommendations (check all that apply):

Comments:

☑ Create a secondary access to the subdivision.
$\ \square$ Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
$\ensuremath{\square}$ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.



Part I: Site Information
Subdivision Information

John Berglund

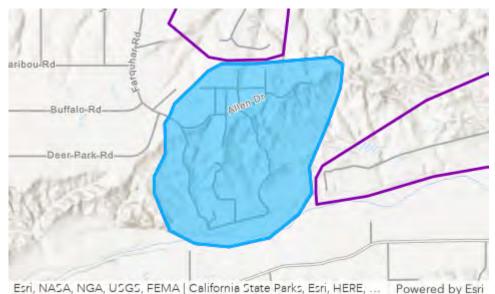
Subdivision Name: Farquhar

Subdivision ID: 21-TGU-2531

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Farquhar



Address: 18855 Farquhar Road City: Cottonwood

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Farquhar 21-TGU-2531

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 27, 2021 58
Survey Results	
Type(s) of vegetation within and around the ☐ Grass	subdivision (check all that apply): ☑ Brush
☑ Trees	□ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): □ Duplex □ Apartments □ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	x all that apply): □ Draft Hydrants □ No Water Source
<u>Comments:</u>	

Farquhar 21-TGU-2531

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Farguhar 21-TGU-2531

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

Comments:

☑ Conduct community-wide evacuations drills.

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



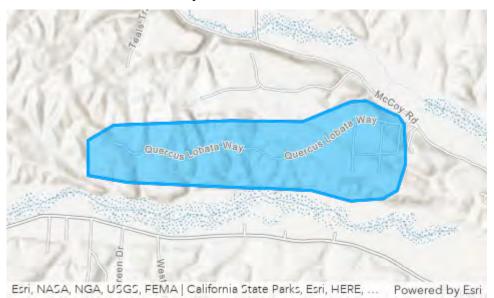
Part I: Site Information
Subdivision Information

Subdivision Name:Quercus LobataSubdivision ID:21-TGU-4765

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Quercus Lobata



Address: 20075 Quercus Lobata Byway City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Quercus Lobata 21-TGU-4765

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 16, 2021 47
Survey Results	
Type(s) of vegetation within and around the <a>Grass	subdivision (check all that apply): ☐ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Quercus Lobata 21-TGU-4765

Is there a secondary egress route in (1267.01(a)(i)(ii))	the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction standar	ble by a passenger vehicle weighing 6,000 pounds rd of the primary road? (14 CCR 1267.01(a)(i)) ed to carry the same quantity of traffic (e.g., a two-lane paved road
□ Yes	☑ No
	tes or limited access; or a road that directs traffic ry road or results in a circular traffic flow, to the (a)(ii))
□ Yes	☑ No
<u>Comments:</u>	

Quercus Lobata 21-TGU-4765

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. □ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☐ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information **Subdivision Information**

John Berglund

Kinney **Subdivision Name:**

Subdivision ID: 21-TGU-6640

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

> > Map: Kinney



City: Red Bluff **Address:** 14605 Kinney Avenue

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact:

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Kinney 21-TGU-6640

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 16, 2021 44
Survey Results	
Type(s) of vegetation within and around the su ☑ Grass	bdivision (check all that apply): □ Brush
☑ Trees	☐ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the su ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	bdivision (check all that apply): ☑ Chimneys □ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check al ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	I that apply): □ Duplex □ Apartments □ Other:
Comments:	
Identified water source(s) availability (check al ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	I l that apply): □ Draft Hydrants □ No Water Source
Comments:	

Kinney 21-TGU-6640

Is there a secondary egress route in 1267.01(a)(i)(ii))	the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction standar	able by a passenger vehicle weighing 6,000 pounds rd of the primary road? (14 CCR 1267.01(a)(i)) red to carry the same quantity of traffic (e.g., a two-lane paved road
□ Yes	☑ No
	tes or limited access; or a road that directs traffic ry road or results in a circular traffic flow, to the (a)(ii))
□ Yes	☑ No
<u>Comments:</u>	

Kinney 21-TGU-6640

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☐ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information **Subdivision Information**

Sacramento **Subdivision Name: Subdivision ID:** 21-TGU-AEE7

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Moderate

Map: Sacramento



Address: 21618 Sacramento Avenue City: Red Bluff

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Sacramento 21-TGU-AEE7

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	December 15, 2021 49
Type(s) of vegetation within and around the so ☑ Grass	ubdivision (check all that apply):
□ Trees	☐ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the set ☐ Canyon ☐ Mid-slope ☐ Saddle ☑ Flat Land	ubdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a ☑ Single Family ☐ Townhomes ☐ Mobile/Manufactured	Il that apply): Duplex Apartments Other:
<u>Comments:</u>	
Identified water source(s) availability (check a ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
Comments:	

Sacramento 21-TGU-AEE7

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traff primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Sacramento 21-TGU-AEE7

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



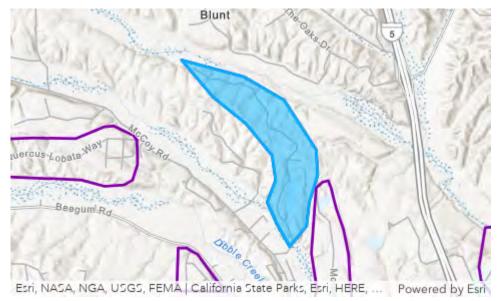
Part I: Site Information
Subdivision Information

Subdivision Name: Peppertree **Subdivision ID:** 21-TGU-B97C

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Peppertree



Address: 14690 Peppertree Lane City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director: John Berglund

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Peppertree 21-TGU-B97C

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	December 16, 2021 35
Type(s) of vegetation within and around the s ☑ Grass	ubdivision (check all that apply):
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the set ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	ubdivision (check all that apply): ☑ Chimneys □ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check a ☑ Single Family □ Townhomes □ Mobile/Manufactured	Ill that apply): Duplex Apartments Other:
<u>Comments:</u>	
Identified water source(s) availability (check a ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Peppertree 21-TGU-B97C

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traff primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Peppertree 21-TGU-B97C

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills. ☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility. Comments:

Page 4 of 4

Fire department access only road with gate



Part I: Site Information **Subdivision Information**

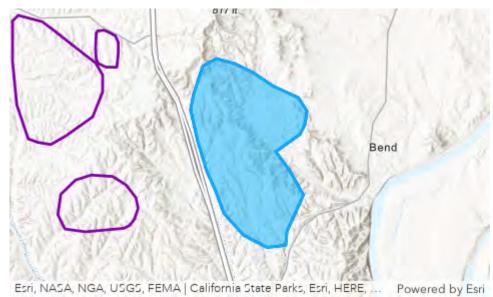
Penner **Subdivision Name:**

Subdivision ID: 21-TGU-B284

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

> > Map: Penner



Address: 15825 Penner Drive City: Red Bluff

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Penner 21-TGU-B284

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 16, 2021 82
Survey Results	
Type(s) of vegetation within and around the sul ☑ Grass	bdivision (check all that apply): ☐ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the sul ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	bdivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
Comments:	
☐ Townhomes	l that apply): ☐ Duplex ☐ Apartments ☐ Other:
Comments:	
Identified water source(s) availability (check all ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	I that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Penner 21-TGU-B284

Is there a secondary egress ro 1267.01(a)(i)(ii))	oute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction	navigable by a passenger vehicle weighing 6,000 standard of the primary road? (14 CCR 1267.01(at to be rated to carry the same quantity of traffic (e.g., a two-lane point).)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that direct e primary road or results in a circular traffic flow, 267.01(a)(ii))	
□ Yes	☑ No	
Comments:		

Penner 21-TGU-B284

Part III: Recommendations

Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision.
$\hfill \square$ Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☐ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
\Box Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
$\ \square$ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
$\ensuremath{\square}$ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.
Comments:
All roads are dirt and some are single lane



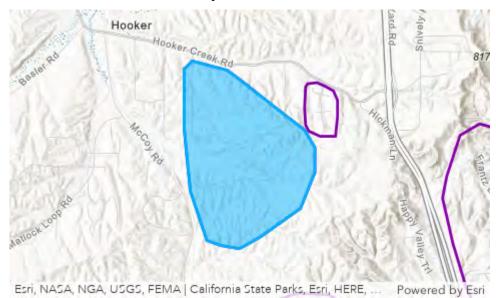
Part I: Site Information
Subdivision Information

Subdivision Name:Oak HollowSubdivision ID:21-TGU-B757

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Oak Hollow



Address: 17280 Oak Hollow Drive City: Cottonwood

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Oak Hollow 21-TGU-B757

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 27, 2021 77
Survey Results	
Type(s) of vegetation within and around the ☐ Grass	subdivision (check all that apply): ☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
Comments:	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Oak Hollow 21-TGU-B757

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Oak Hollow 21-TGU-B757

Part III: Recommendations Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills. ☑ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information
Subdivision Information

Subdivision Name: Ranchero

Subdivision ID: 21-TGU-BD77

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Ranchero



Address: 15975 Ranchero Driveq City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Ranchero 21-TGU-BD77

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units Survey Results	December 27, 2021 38
Type(s) of vegetation within and around the sul	bdivision (check all that apply): ☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the sul ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	bdivision (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top
Comments:	
	l that apply): ☐ Duplex ☐ Apartments ☐ Other:
Comments:	
Identified water source(s) availability (check all ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	I that apply): ☐ Draft Hydrants ☑ No Water Source
Comments:	

Ranchero 21-TGU-BD77

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro	
□ Yes	☑ No	
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Ranchero 21-TGU-BD77

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☐ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☐ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☐ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices

☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.

☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information
Subdivision Information

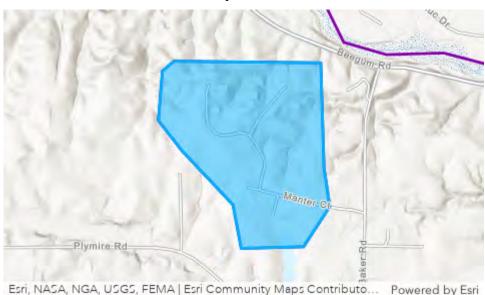
Subdivision Name: Mater

Subdivision ID: 21-TGU-CB8B

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Mater



Address: 20685 Manter Court City: Red Bluff

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Mater 21-TGU-CB8B

Part II: Site Information and Fire Survey

Date Surveyed:	December 16, 2021 41
Estimated number of dwelling units Survey Results	71
Type(s) of vegetation within and around the <a>Grass	subdivision (check all that apply): ☐ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Mater 21-TGU-CB8B

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,0 standard of the primary road? (14 CCR 1267.01 to be rated to carry the same quantity of traffic (e.g., a two-land).	L(a)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that dire primary road or results in a circular traffic flo 267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Mater 21-TGU-CB8B

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. □ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☐ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information
Subdivision Information

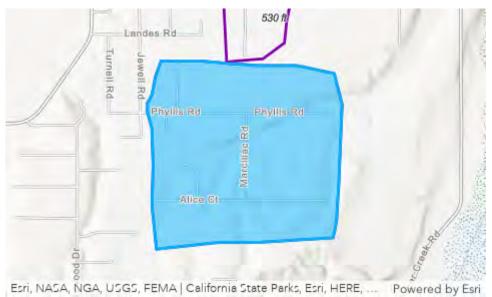
Subdivision Name: Phyllis

Subdivision ID: 21-TGU-D3CF

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Phyllis



Address: 18470 Phyllis Road City: Cottonwood

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Phyllis 21-TGU-D3CF

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 15, 2021 81
Survey Results	
Type(s) of vegetation within and around the su ☐ Grass	bdivision (check all that apply): ☑ Brush
☑ Trees	□ Timber
☐ Other:	
<u>Comments:</u>	
Topographic features within and around the sull ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	bdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☑ Ridge Top
Comments:	
Residential structure types identified (check all ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	l that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check all Hydrants Private Water Tanks Wharf Hydrant	I that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Phyllis 21-TGU-D3CF

Is there a secondary egress 1267.01(a)(i)(ii))	oute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction	e navigable by a passenger vehicle weighing 6,000 pound is standard of the primary road? (14 CCR 1267.01(a)(i)) re to be rated to carry the same quantity of traffic (e.g., a two-lane paved roade).	
□ Yes	☑ No	
	cked gates or limited access; or a road that directs traffine primary road or results in a circular traffic flow, to the 1267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Phyllis 21-TGU-D3CF

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

Comments:

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



Part I: Site Information
Subdivision Information

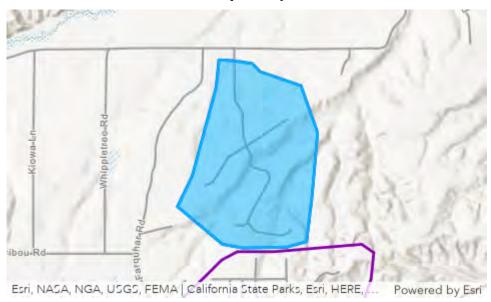
Subdivision Name: Terry

Subdivision ID: 21-TGU-D810

Subdivision is located within: Responsibility Area Fire Hazard Severity Zone

SRA Very High

Map: Terry



Address: 19485 Terry Road City: Cottonwood

County: Tehama CALFIRE Administrative Unit:

TGU - Tehama - Glenn Unit

CAL FIRE Unit Contact: Local Planning Director:

John Berglund Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Terry 21-TGU-D810

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 27, 2021 57
Survey Results	
Type(s) of vegetation within and around the sub ☐ Grass	division (check all that apply): ☑ Brush
☑ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the sub ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	division (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
<u>Comments</u> :	
<u>Comments:</u>	
Identified water source(s) availability (check all definition of the source of the source) ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	that apply): ☐ Draft Hydrants ☑ No Water Source
Comments:	

Terry 21-TGU-D810

Is there a secondary egress r 1267.01(a)(i)(ii))	oute in the subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction	e navigable by a passenger vehicle weighing 6,000 pound standard of the primary road? (14 CCR 1267.01(a)(i)) e to be rated to carry the same quantity of traffic (e.g., a two-lane paved roae).
□ Yes	☑ No
	cked gates or limited access; or a road that directs traffice e primary road or results in a circular traffic flow, to the .267.01(a)(ii))
□ Yes	☑ No
Comments:	

Terry 21-TGU-D810

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☐ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☐ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.

☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices

☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.

☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information **Subdivision Information**

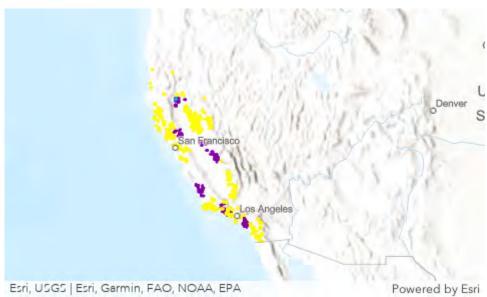
Eighmy **Subdivision Name:**

Subdivision ID: 21-TGU-DC7C

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> **SRA** Very High

> > Map: Eighmy



Address: 19565 Eighmy Road City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Eighmy 21-TGU-DC7C

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 15, 2021 76
Survey Results	
Type(s) of vegetation within and around the sub ☐ Grass	odivision (check all that apply): ☑ Brush
☑ Trees	□ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the subscript Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	odivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
<u>Comments</u> :	
☐ Townhomes	that apply): □ Duplex □ Apartments □ Other:
<u>Comments:</u>	
Identified water source(s) availability (check all ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Eighmy 21-TGU-DC7C

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 pstandard of the primary road? (14 CCR 1267.01(a)(i to be rated to carry the same quantity of traffic (e.g., a two-lane pay).	i))
□ Yes	☑ No	
	ced gates or limited access; or a road that directs to primary road or results in a circular traffic flow, to 267.01(a)(ii))	
□ Yes	☑ No	
Comments:		

Eighmy 21-TGU-DC7C

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

Comments:

☑ Conduct community-wide evacuations drills.

not be evident during periods of low visibility.

☑ Install reflective markers to indicate road edges or other areas of danger that might



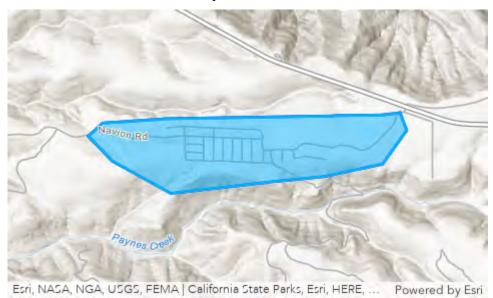
Part I: Site Information **Subdivision Information**

Ponderosa **Subdivision Name: Subdivision ID:** 21-TGU-E4A4

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Ponderosa



Address: 33925 Ponderosa Way City: Paynes Creek

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Ponderosa 21-TGU-E4A4

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	January 3, 2022 106
Survey Results	
Type(s) of vegetation within and around the ☐ Grass	subdivision (check all that apply): ☑ Brush
☑ Trees	☑ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☑ Chimneys □ Slope Setback ☑ Ridge Top
<u>Comments</u> :	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source
<u>Comments:</u>	

Ponderosa 21-TGU-E4A4

Is there a secondary egress route in the subdivision? (PRC 4290.5, 14 CCR 1267.01(a)(i)(ii))			
□ Yes	☑ No		
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro		
□ Yes	☑ No		
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))		
□ Yes	☑ No		
<u>Comments:</u>			

Ponderosa 21-TGU-E4A4

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☐ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☐ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California

☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices

\square Where additional routes may exist, but with a gate that does not conform to the
requirements in 14 CCR § 1273.09, recommend that gates (including private gates)
remain unlocked during red flag warnings or high fire danger conditions.

☑ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

Code of Regulations, title 24, part 9.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information **Subdivision Information**

Lake California **Subdivision Name: Subdivision ID:** 21-TGU-E5A7

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA High

Map: Lake California



Address: 19906 Lake California Dr. City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Lake California 21-TGU-E5A7

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 15, 2021 950
Survey Results Type(s) of vegetation within and around the	subdivision (check all that apply):
☐ Grass	☑ Brush
☑ Trees	□ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
Comments:	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☑ Duplex ☐ Apartments ☐ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Lake California 21-TGU-E5A7

Is there a secondary egress route in the subdivision? (PRC 4290.5, 14 CCR 1267.01(a)(i)(ii))			
□ Yes	☑ No		
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro		
□ Yes	☑ No		
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))		
□ Yes	☑ No		
<u>Comments:</u>			

Lake California 21-TGU-E5A7

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.

☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices

☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.

☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Part I: Site Information **Subdivision Information**

Plateau **Subdivision Name:**

Subdivision ID: 21-TGU-F69E

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

> > Map: Plateau



Address: 19485 Plateau Drive City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Plateau 21-TGU-F69E

Part II: Site Information and Fire Survey

Date Surveyed: Estimated number of dwelling units	December 15, 2021 40
Survey Results	
Type(s) of vegetation within and around the s ☑ Grass	subdivision (check all that apply): ☑ Brush
☐ Trees	☐ Timber
□ Other:	
<u>Comments:</u>	
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top
Comments:	
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): □ Duplex □ Apartments □ Other:
<u>Comments:</u>	
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☐ No Water Source
<u>Comments:</u>	

Plateau 21-TGU-F69E

Is there a secondary egress route in the subdivision? (PRC 4290.5, 14 CCR 1267.01(a)(i)(ii))			
□ Yes	☑ No		
or less, of equal construction s	navigable by a passenger vehicle weighing 6,000 poun standard of the primary road? (14 CCR 1267.01(a)(i)) to be rated to carry the same quantity of traffic (e.g., a two-lane paved ro		
□ Yes	☑ No		
	eed gates or limited access; or a road that directs traffice primary road or results in a circular traffic flow, to the 67.01(a)(ii))		
□ Yes	☑ No		
<u>Comments:</u>			

Plateau 21-TGU-F69E

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Subdivision Survey Report

Part I: Site Information **Subdivision Information**

Del Norte **Subdivision Name:**

Subdivision ID: 21-TGU-F89D

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Del Norte



Address: 18725 Del Norte Drive City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Del Norte 21-TGU-F89D

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed: Estimated number of dwelling units	December 15, 2021 58						
Survey Results							
Type(s) of vegetation within and around the s ☑ Grass	subdivision (check all that apply): ☑ Brush						
☑ Trees	☐ Timber						
□ Other:							
<u>Comments:</u>							
Topographic features within and around the s ☐ Canyon ☐ Mid-slope ☑ Saddle ☑ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☐ Ridge Top						
Comments:							
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): □ Duplex □ Apartments □ Other:						
<u>Comments:</u>							
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source						
<u>Comments:</u>							

Del Norte 21-TGU-F89D

Access and Evacuation

Is there a secondary egress rou 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,0 tandard of the primary road? (14 CCR 1267.01 to be rated to carry the same quantity of traffic (e.g., a two-land	.(a)(i))
□ Yes	☑ No	
	ed gates or limited access; or a road that dire primary road or results in a circular traffic flo 67.01(a)(ii))	
□ Yes	☑ No	
Comments:		

Del Norte 21-TGU-F89D

Part III: Recommendations Access and Evacuation Recommendations (check all that apply):

☑ Create a secondary access to the subdivision.
\square Make improvements to the existing secondary access to the subdivision.
☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
□ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
$\ \square$ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
☑ Conduct community-wide evacuations drills.
oxdot Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Subdivision Survey Report

Part I: Site Information **Subdivision Information**

Broadhurst **Subdivision Name: Subdivision ID:** 21-TGU-FA30

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA High

Map: Broadhurst



Address: 19650 Broadhurst Road City: Cottonwood

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Broadhurst 21-TGU-FA30

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed:	December 15, 2021 157							
Estimated number of dwelling units Survey Results	137							
Type(s) of vegetation within and around the se ☑ Grass	ubdivision (check all that apply): ☑ Brush							
☑ Trees	☐ Timber							
□ Other:								
<u>Comments:</u>								
Topographic features within and around the set ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	ubdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☑ Ridge Top							
<u>Comments</u> :								
Residential structure types identified (check a ☑ Single Family ☐ Townhomes ☐ Mobile/Manufactured	Il that apply): ☐ Duplex ☐ Apartments ☐ Other:							
<u>Comments:</u>								
Identified water source(s) availability (check a ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source							
<u>Comments:</u>								

Broadhurst 21-TGU-FA30

Access and Evacuation

Is there a secondary egress route in the 1267.01(a)(i)(ii))	subdivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
or less, of equal construction standard of	by a passenger vehicle weighing 6,000 pounds of the primary road? (14 CCR 1267.01(a)(i)) o carry the same quantity of traffic (e.g., a two-lane paved road
□ Yes	☑ No
	or limited access; or a road that directs traffic oad or results in a circular traffic flow, to the ii))
□ Yes	☑ No
Comments:	

Broadhurst 21-TGU-FA30

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:



Subdivision Survey Report

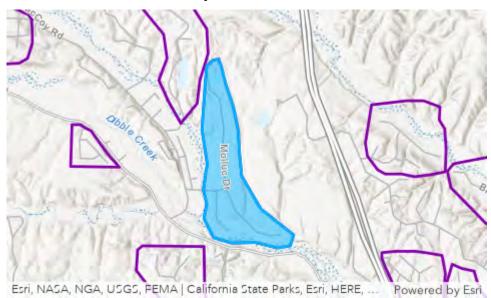
Part I: Site Information **Subdivision Information**

Saddlebrook **Subdivision Name: Subdivision ID:** 21-TGU-FDA9

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Saddlebrook



Address: 20735 Saddlebrook Drive City: Red Bluff

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Saddlebrook 21-TGU-FDA9

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed: Estimated number of dwelling units	December 16, 2021 103						
Survey Results							
Type(s) of vegetation within and around the ☐ Grass	subdivision (check all that apply): ☐ Brush						
☑ Trees	☐ Timber						
□ Other:							
<u>Comments:</u>							
Topographic features within and around the ☐ Canyon ☐ Mid-slope ☐ Saddle ☑ Flat Land	subdivision (check all that apply): ☐ Chimneys ☐ Slope Setback ☑ Ridge Top						
<u>Comments</u> :							
Residential structure types identified (check ☐ Single Family ☐ Townhomes ☐ Mobile/Manufactured	all that apply): ☐ Duplex ☐ Apartments ☐ Other:						
<u>Comments:</u>							
Identified water source(s) availability (check ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	all that apply): ☐ Draft Hydrants ☑ No Water Source						
<u>Comments:</u>							

Saddlebrook 21-TGU-FDA9

Access and Evacuation

Is there a secondary egress route in the sub 1267.01(a)(i)(ii))	odivision? (PRC 4290.5, 14 CCR
□ Yes	☑ No
Is the secondary egress route navigable by or less, of equal construction standard of the Note: The secondary road does not have to be rated to carry and a one-lane paved road is acceptable).	ne primary road? (14 CCR 1267.01(a)(i))
□ Yes	☑ No
Is there another road with locked gates or lito the same outlet road as the primary road extent practicable? (14 CCR 1267.01(a)(ii))	
□ Yes	☑ No
<u>Comments:</u>	
It does have an additional fire department only a	ccess road

Saddlebrook 21-TGU-FDA9

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit

☑ Conduct community-wide evacuations drills.

☐ Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

street parking so a wider pathway is available to support rapid evacuation.

Comments:



Subdivision Survey Report

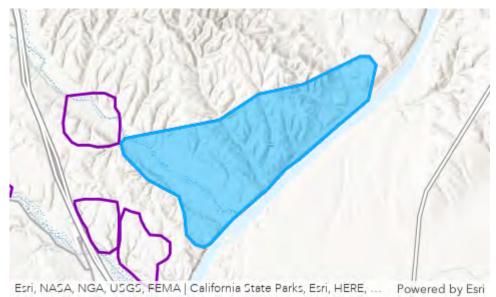
Part I: Site Information **Subdivision Information**

Surrey Village **Subdivision Name: Subdivision ID:** 22- TGU-78C8

Responsibility Area Fire Hazard Severity Zone Subdivision is located within:

> SRA Very High

Map: Surrey Village



Address: 22292 Adobe Road City: Red Bluff

County: Tehama **CALFIRE Administrative Unit:**

TGU - Tehama - Glenn Unit

Local Planning Director: CAL FIRE Unit Contact: John Berglund

Scot Timboe

Local GIS Coordinator: Local Government Fire Marshal:

John Berglund - CAL FIRE

Primary Fire Protection Agency: County Fire Department

Comments: Tehama County FD/CAL FIRE

Surrey Village 22- TGU-78C8

Part II: Site Information and Fire Survey

Subdivision Description

Date Surveyed: Estimated number of dwelling units	February 2, 2022 130							
Survey Results								
Type(s) of vegetation within and around the sub ☐ Grass	division (check all that apply): ☑ Brush							
☑ Trees	☐ Timber							
□ Other:								
<u>Comments:</u>								
Topographic features within and around the sub- ☐ Canyon ☐ Mid-slope ☐ Saddle ☐ Flat Land	division (check all that apply): ☑ Chimneys ☑ Slope Setback ☑ Ridge Top							
<u>Comments</u> :								
☐ Townhomes ☐	that apply): Duplex Apartments Other:							
Comments:								
Identified water source(s) availability (check all definition of the source of the source) ☐ Hydrants ☐ Private Water Tanks ☐ Wharf Hydrant	that apply): □ Draft Hydrants □ No Water Source							
Comments:								

Surrey Village 22- TGU-78C8

Access and Evacuation

Is there a secondary egress ro 1267.01(a)(i)(ii))	ute in the subdivision? (PRC 4290.5, 14 CCR	
□ Yes	☑ No	
or less, of equal construction s	navigable by a passenger vehicle weighing 6,0 standard of the primary road? (14 CCR 1267.01 to be rated to carry the same quantity of traffic (e.g., a two-land).	L(a)(i))
□ Yes	☑ No	
	ked gates or limited access; or a road that dire primary road or results in a circular traffic flo 267.01(a)(ii))	
□ Yes	☑ No	
<u>Comments:</u>		

Surrey Village 22- TGU-78C8

Part III: Recommendations Access and Evacuation Recommendations (check all that apply): ☑ Create a secondary access to the subdivision. ☐ Make improvements to the existing secondary access to the subdivision. ☑ Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9. ☑ Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices ☐ Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions. ☐ When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation. ☑ Conduct community-wide evacuations drills.

☑ Install reflective markers to indicate road edges or other areas of danger that might

not be evident during periods of low visibility.

Comments:

Appendix B

Lake California Drive 2023 PROTECT grant application





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PROTECT Discretionary Program: Community Resiliency and Evacuation Route Grant

Lake California Drive Resiliency and Emergency Access Project (REAP)

I. Basic Project Description, Location and Parties

The Tehama County Transportation Commission (TCTC) is the eligible and sole lead applicant for the Community Resiliency and Evacuation Route Grant. If selected, the TCTC would be responsible for administering the awarded funds at which time Jessica Riske-Gomez, Deputy Director Public Works - Transportation, would be the point contact. The TCTC is a unit of local government in Tehama County, California. TCTC's staff has experience with award and expenditure of federal funds including competitive construction awards through the Federal Transit Administration grant of Bus and Bus Facilities Program and the Federal Highway Administration (FTA) planning awards such as the Bridge Investment Program – Planning, Bridge Projects, and Large Bridge Projects. They are currently executing a bid packet award for construction under the Buses and Bus Facilities Program. Furthermore, the staff are fully compliant with all reporting required by the Office of Civil Rights in their management of the operations contract for the Tehama Area Rural eXpress (TRAX) which is partially federally funded and requires meeting Disadvantaged Business Enterprise requirements.

The Lake California Drive Resiliency and Emergency Access Project (REAP) is an eligible project under Notice of Funding Opportunity (NOFO) Section C.3.a. which will ensure the ability of an evacuation route to provide safe passage during evacuation events, reduces potential risk of damage to an evacuation route and includes restoration of an existing evacuation route that is not designed to meet the anticipated demand during an emergency event. Previously incurred costs to Lake California Drive include a bridge reconstruction project over Taylor Wash from 2007-2013, west of the Lake California Drive and Del Mar Drive intersection that cost TCTC over \$1.9 million.

Lake California Drive is a public major collector roadway in rural northern Tehama County, California. Lake California Drive is an approximate five (5) mile stretch of road that begins at the Bowman Road intersection of Interstate-5 (I-5) at Exit 662 and ends within the rural community of Lake California at the intersection of Rio Alto Drive. Currently, Lake California Drive is a narrow two-lane roadway and is the only publicly available roadway to enter and exit Lake California and rural residences including Cottonwood Creek Ranch, farms and ranches. Lake California Drive also provides the only paved access to Del Mar Drive and Emerald Downs Lane which connect to rural homes south of Lake California Drive near the North and South Fork of Patterson Creek. Lake California Drive's proximity to I-5 provides the rural community of Lake California and nearby residences with convenient access to Cottonwood, recreational destinations, schools, employment, medical, and retail centers.

During emergency events, the roadway has been shut down in both traffic directions to provide ingress/egress for emergency services. The lack of adequate ingress/egress for emergency services has resulted in prolonged periods of stopped traffic for residents of Lake California, Cottonwood Creek Ranch and rural residences south of Lake California Drive before being able to enter or exit their community.



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The current configuration of Lake California Drive does not address the recommended improvements outlined in the 2020 Tehama County Regional Transportation Plan (RTP) for shoulder widening and the implementation of a safe Class IV facility. Additionally, Tehama County is currently in the report development phase of the countywide Secondary Access & Evacuation Routing Study, which will assess numerous vulnerable communities within Tehama County, including Lake California and surrounding rural residences, and develop recommendations for roadway improvements to improve evacuation resilience and efficiency.

The Lake California Drive REAP would span approximately three and a half (3.5) miles, beginning at the Bowman Road and Lake California Drive intersection, connect to an existing Caltrans Park & Ride facility and conclude approximately 500 feet west of the Sawtooth Drive and Lake California Drive intersection. The proposed implementation of a shared-use path will provide a safe facility for pedestrians and bicyclists to utilize daily, promoting active transportation benefits, providing critical connections to transit and rideshare options and reducing vehicles on the roadway. During emergency events, the shared-use path can be utilized by emergency responders to mitigate traffic delays and decrease emergency response time to hazards. The proposed shared-use path would begin at the Lake California entry gate, provide linkage to an existing Class IV facility at Del Mar Drive, extend and conclude at the Bowman Road intersection. The project would improve roadway safety for all transportation modes, reduce traffic congestion particularly during hazards, provide necessary access for emergency services and promote the use of non-motorized transportation. These improvements would allow residents, visitors, and emergency services to commute, recreate and respond to and from Lake California and nearby rural residences with efficiency and safety.

A.

The project is in a 100% Transportation Disadvantaged Census Tract (Census Tract 2) consisting of a Resilience Disadvantage Indicator, as determined by the US DOT's Transportation Disadvantaged Census Tract Tool. Additionally, the ArcGIS tool identified the project area as a Historically Disadvantaged Community.

В.

Caltrans is currently developing a Resilience Improvement Plan, in which the proposed Lake California Drive Resiliency and Emergency Access Project will be included and prioritized at the time of submission to FHWA. The State Climate Resilience Improvement Plan for Transportation (SCRIPT) will illustrate California's plan for both climate resilience planning and project delivery by:

- summarizing the California policy context of the driving legislation, executive orders, policies, and science that have advanced agency planning;
- sharing existing and planned transportation climate adaptation efforts;
- explaining the foundation of existing climate resilience planning through already completed vulnerability and risk-based assessments of the transportation system that have allowed for data-driven investment decisions, and;



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 explaining how the PROTECT program is administered in California, specifically through programs established by Senate Bill 198 (Government Code § 14560).

The SCRIPT includes a Project Priority List identifying selected projects for PROTECT formula and discretionary investments in California to-date. This list represents a range of transportation climate adaptation needs, from planning studies to capital projects, that will make the multimodal transportation system safer, more reliable, and more resilient to future climate risks for all users.

In addition to the Caltrans SCRIPT, the TCTC and a consultant are in the report development phase of the Tehama County Secondary Access & Evacuation Routing Study. The Secondary Access & Routing Study aims to provide the County with a comprehensive approach to emergency preparedness and evacuation routing. The Study is analyzing existing issues and identifying infrastructure improvements to ensure evacuation or secondary access routes can meet the needs of vulnerable communities. Improvements on Lake California Drive have been a consistent priority for Tehama County. Residents of Lake California and the rural residences that depend on Lake California Drive for critical access have voiced recurring concern over emergency evacuation and access constraints. These improvements proposed in the current PROTECT application will mitigate the evacuation and safety challenges the community has been facing for decades.

C.

The project area is not located in a current floodplain as identified by the Federal Emergency Management Agency (FEMA). Therefore, the project will not require the implementation of one or more applicable components of the risk mitigation plan under section 322 Mitigation Planning in the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

D.

Lake California was built in the 1970s and is a federally designated disadvantaged and rural area (See Attachments 6 and 7) with a population of 3,668. Lake California and nearby rural residences are in northern Tehama County, south of Cottonwood, northeast of Red Bluff and on the western bank of the Sacramento River. The community of Lake California consists of approximately 5,950 acres and over 2,000 parcels. Lake California's primary development is residential, the 2009 Tehama County General Plan anticipates significant development and population growth to occur within Lake California and around the project area.

Lake California, Cottonwood Creek Ranch, rural residences, ranches and farms south of Lake California Drive are in U.S. Census Bureau Census Tract 2.01 in Tehama County. According to the American Community Survey (ACS), the 2021 5-year estimated population of Census Tract 2.01 is 4,299. Lake California accounts for approximately 3,668 of the Tract population. Lake California has a median population age of 36.8, whereas the median age of the population of Census Tract 2.01 is 37.3. However, according to the ACS 2021 5-year estimate, Census Tract 2.01 consists of 19.4% of residents aged 65 or older, comparably 21.1% of Tehama County residents are aged 65 or older. The 2021 ACS 5-year

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estimates that 14.5% of Census Tract 2.01 residents experience poverty and 14.9% of the population in Tehama County experience poverty. Residents of Census Tract 2.01 experience long commutes, approximately 38.4 minutes compared to 19.5 minutes for Tehama County, according to 2021 ACS 5-year estimates.



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PROTECT Discretionary Program: Community Resilience and Evacuation Route Grant

Lake California Drive Resiliency and Emergency Access Project (REAP)

Merit Criteria

Criterion #1: Vulnerability and Risk

1.

Lake California Drive and residents of Lake California, Cottonwood Creek Ranch, and nearby rural residences are exposed and vulnerable to several natural hazards such as drought, wildfire, and extreme temperatures. The Climate and Economic Justice Screening Tool (CEJST), identifies the project area, located in Census Tract 06103000200, as a Disadvantaged Community (DAC). The project area is in the 90th percentile for projected wildfire risk, the 99th percentile for expected agricultural loss and 67th percentile for low-income. According to Cal Fire's Fire Hazard Severity Zones (FHSZ), the project area, Lake California and surrounding rural residences are in a High Fire Hazard Severity Zone (HFHSZ). The project area is not located within an identified FEMA floodplain.

2.

Lake California Drive is the only public roadway that provides access to approximately 4,000 people in the Lake California community, Cottonwood Creek Ranch and surrounding rural residences. The existing configuration of the Lake California Drive is a narrow, two-lane roadway with absent non-motorized facilities, minimal lighting, narrow shoulder width and limited ingress/egress for emergency services. During hazard events, traffic in both directions has been halted to provide ingress/egress for emergency services, interrupting traffic flow and placing avoidable stress on residents and the infrastructure. Public complaints of this are documented in Attachment 14. The current configuration of Lake California Drive has produced unsafe roadway conditions and have heightened existing safety concerns from residents that rely on this critical roadway as extreme natural hazard events are occurring more often and with more severity.

The Lake California Drive Resiliency and Emergency Access Project (REAP) will implement necessary infrastructure improvements such as additional ingress/egress, a Clear Recovery Zone, improved lighting, designated shared-use path and shoulder widening. These proposed improvements will help reduce the risks of exposure to existing and future potential natural hazard events by improving evacuation safety standards and increasing community and infrastructure resilience. The creation of additional ingress/egress will reduce consequences of hazard events such as fatalities, injuries, or significant structural damage by providing residents with a dependable evacuation route and emergency services with a designated shared-use path that doubles as an emergency access route.



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The proposed project will aim to reduce the sensitivity of the roadway from the stressors of vehicles and potential natural hazards. Lake California Drive was designed and constructed in the early 1970s, utilizing the outdated guidelines and standards from that time. Minimal improvements have occurred since initial construction such as repaving, stripping, bridge and pothole repairs. The proposed improvements identified in the Lake California Drive REAP will improve the infrastructures' ability to withstand and respond to environmental stressors through reconstruction using current guidelines and standards. The proposed addition of a shared-use path intends to reduce car dependency and the number of vehicles on the roadway by providing a safe and separate non-motorized facility. The shared-use path can be utilized by emergency responders during hazard events to improve response time and support the continued operation of the transportation system.

3.

The community has endured numerous years of depending on an outdated roadway configuration that is unfit and unprepared to respond to existing and future conditions. If residents and emergency services do not have a safe roadway for evacuation, Lake California, rural residences, farms and ranches that depend on Lake California Drive are at-risk for devastation from natural hazards. The project will consider and address the identified natural hazards that pose a threat to Lake California Drive such as wildfire. The proposed project will implement several infrastructure improvements including surface treatments, additional ingress/egress, shoulder widening and a creative, dual shared-use/emergency path. The implementation of a dual shared-use/emergency path will enhance the adaptability of the roadway by reducing vehicular strain during non-emergencies and providing a designated path for emergency services during hazard events. The improvements are aimed to strengthen the overall infrastructure to increase roadway safety during the event of an emergency evacuation. The proposed improvements will aid the roadway in supporting continued and future roadway capacity. If the proposed improvements are not implemented, the infrastructure will continue to be unsuitable as a critical evacuation route.

Criterion #2: Criticality to Community

1.

Lake California Drive is the only ingress/egress for multiple communities including Lake California, therefore improvements to the corridor are critical to supporting community functions for residents who rely on the roadway and emergency services. It is the only paved, publicly available roadway for residents and emergency services to utilize to reach Lake California, nearby rural residences, farms and ranches. There have been several incidents where both lanes of the roadway have been shut down to provide emergency responders with access to the roadway, resulting in increased response times for emergencies and residents experiencing prolonged traffic delays. The Lake California Drive Resiliency and Emergency Access Project (REAP) improvements will maintain and support the continued and growing reliance on Lake California Drive. The annual average daily traffic (AADT) at the intersection of Lake California Drive and Bowman Road is approximately 42,000. The AADT is relatively high compared to



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other major roads in the County. Additionally, the Lake California Drive REAP includes a Safety Benefit for Improved roadway as detailed in the Benefit-Cost Analysis (BCA).

Lake California Drive is not only an evacuation route, but it is the only roadway that provides Lake California residents and surrounding rural residences linkage to Interstate-5 (I-5) and neighboring communities such as Cottonwood, Redding and Red Bluff. Lake California Drive provides residents with critical access to medical, commercial and employment areas that are not available near the project area. Prime destinations and facilities that are not near the project area include the Lassen Medical Clinic, Evergreen Union School District, Valley West Ace Hardware and one of the County's top employers, Sierra Pacific Industries. The roadway provides access to rural residential subdivision areas via Del Mar Drive and Emerald Downs Lane, south of Lake California Drive. A Caltrans operated Park & Ride facility is located on Lake California Drive, which provides commuters with the opportunity to utilize rideshare and carpooling modes to employment, medical, or retail destinations. Less than a mile from the Lake California Drive and Bowman Road intersection is a Tehama Rural Area eXpress (TRAX) transit stop on the Shasta-Tehama Connection route, which enables transit users to get from Red Bluff to Anderson in Shasta County. The current infrastructure along Lake California Drive makes it difficult to access these facilities without a vehicle. The proposed addition of a shared-use path along Lake California Drive will provide a safe and separate path for transit dependent members of the rural community to access these facilities. Improving the connection between commuters to transit facilities will create more equitable access to jobs and services in Tehama County and neighboring Shasta County.

2.

If the proposed infrastructure improvements are not completed, residents of Lake California, Cottonwood Creek Ranch, and nearby rural residences will suffer inadequate evacuation route conditions such as increased emergency response and evacuation delays. Residents of Lake California and members of the Lake California Property Owners Association (POA) have persistently expressed concerns regarding the evacuation safety of Lake California Drive (See Attachment 10, Letters of Support). The POA and residents have submitted requests and comments to the Tehama County Board of Supervisors (BOS) and Public Works Department to implement safety improvements to the roadway. Additionally, the project has been identified as a high priority project throughout several Tehama County planning documents including the 2009 General Plan, the 2019 Systemic Safety Analysis, and the 2020 Regional Transportation Plan (RTP). Between January and June 2023, the TCTC and a consultant conducted initial outreach for the Tehama County Secondary Access & Evacuation Routing Study to gather community feedback regarding evacuation concerns. Residents of Lake California and nearby rural residences expressed repeated concerns regarding evacuations under the current configuration of Lake California Drive.

Criterion #3: Design Elements



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1.

The anticipated service life of Lake California Drive was determined through site visits, maintenance history, and climate-based data. Kittleson and Associates prepared the 2019 Systemic Safety Analysis Report, which analyzed existing roadway conditions in Tehama County, determined priority safety improvements, and conducted multiple site visits to Lake California Drive. The Systemic Safety Analysis Report identified Lake California Drive as a priority improvement project and determined that the roadway consisted of limited recovery zones for safety. Lake California Drive was designed in the early 1970s and constructed under the safety standards and guidelines of that time. The initial construction and design of the roadway did not anticipate current traffic flow and is not designed to effectively support existing and future population growth. The roadway does not provide sufficient support to daily traffic operations and will be unsuitable for residents and emergency services to utilize during an evacuation emergency. Lake California Drive has had previous safety and maintenance repairs such as repaving, striping, emergency drainage repairs and a bridge repair at Taylor Wash.

2.

The proposed addition of a shared-use path will address Lake California Drive's current vulnerabilities of poor ingress/egress, nonexistent non-motorized facilities, and insufficient emergency service access. The Benefit Cost Analysis revealed a lifetime (20 year) cost benefit of over \$46 million with cost savings being realized immediately following construction in 2026 (see Attachment 4 BCA). These benefits appear in the reduction in natural hazards through improved response times, reduction of roadway closures from traffic collisions, health and safety benefits, and improved accessibility for walkers and cyclists. The reduction in vulnerability will be measurable in the increase of non-motorized vehicle traffic and the decrease in response time for emergency vehicles. Methodologies such as traffic studies and surveys will provide quantifiable results in the reduction of motorized vehicle traffic and the increase of non-motorized vehicle traffic. Reduction in evacuation times during future hazard events will indicate reduced vulnerability to the infrastructure and residents during those events.

3.

The project will consider and use nature-based solutions where appropriate and necessary. The project area is not within or near a wetland, marsh, or riverbank. The project will implement a shared-use path which will not consist of green-scaping, rain gardens or bioswales. Additionally, the surrounding environment is primarily rural and agricultural, therefore minimal aesthetic improvements will be implemented to maintain consistency with the existing geography.

4.

Lake California Drive has been identified as a safety concern in the 2019 Systemic Safety Analysis Report (Attachment 11) and the 2016 Regional Transportation Plan. Currently, the



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roadway is being identified in the Tehama County Secondary Access & Evacuation Routing Study as a priority evacuation route for safety and resilience improvements. The Secondary Access & Evacuation Routing Study Existing Conditions Report identified a critical evacuation route. Current vulnerabilities to the roadway include narrow lanes and shoulder width, no lighting, absent designated non-motorized facility and minimal ingress/egress for emergency events. PROTECT Discretionary Grant funds would improve safety, reduce current and future vulnerabilities and support the overdue improvements to Lake California Drive by funding the construction of the proposed project.

5.

The project will be regularly maintained by the County of Tehama as owner and operator of the facility. Furthermore, the improvements will lower regular maintenance costs by bringing the roadway up to current design and construction standards and materials used. Additionally, lower maintenance costs will be realized through proper design techniques during storm events. During a significant weather event, the inadequate drainage system creates accelerated deterioration of the road resulting in emergency repairs and damage to residents' vehicles. The proposed design elements will include drainage infrastructure upgrades, reducing the deterioration of the road and the need for constant maintenance and repairs.

Criterion #4: Public Engagement, Partnerships and Collaboration

1.

Throughout each stage of the Lake California Drive Resiliency and Emergency Access Project (REAP), the project team will engage residents and community-based organizations to ensure that equity considerations for underserved communities are meaningfully integrated into the project. The TCTC and project team will expand upon previous region-wide community outreach conducted for adopted regional plans such as the 2019 Active Transportation Plan (ATP), 2020 Regional Transportation Plan (RTP) and the 2009 General Plan. In January 2023, the Secondary Access & Evacuation Routing Study project team held an introductory project outreach meeting at the Lake California Property Owners Association (POA) to introduce the Study and solicit initial feedback from the community (Attachment 13 - Flyer). Throughout these efforts, the Lake California POA and residents have repeatedly expressed concern and the need for safety improvements along Lake California Drive.

The TCTC will engage with residents, community leaders, organizations and emergency service responders through various outreach methods such as a project specific webpage, existing social media platforms and surveys to gather diverse, significant and applicable input that will be considered during project planning and project decision making. The project team will engage the community, including minority groups, through project specific announcements, social media pages, physical flyers, mailers and other advertisement efforts. All feedback will be taken into consideration throughout each project phase. Preliminary feedback has determined that the Lake California Drive REAP is a top priority project for Tehama County and highly desired and



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necessary to support the safety of Lake California and nearby rural residents. The project team has taken existing feedback received to create a series of preliminary conceptual designs for the project. Further input will be solicited and used to ensure the designs will meet the needs of the community and emergency service standards. Valuable feedback from the community, organizations and public agencies will be considered and incorporated into the project-decision making process.

2.

Partnerships with community stakeholders are critical to ensuring the project meets the needs of Lake California and rural residents who rely on the critical roadway. TCTC staff and the project team will provide stakeholders the opportunity to be involved in the project and share pertinent feedback. The project team will coordinate with local community stakeholders including but not limited to the Lake California POA, Latino Outreach of Tehama County, nearby school districts, California Tribal TANF Partnership, Empower Tehama, Back to School project, Garden Club, and other minority led and focused organizations.

3.

Partnerships and coordination will be conducted by the TCTC and a consultant with partner agencies including the Tehama County Fire Department, Caltrans District 2, Tehama County Sheriff's Office, TRAX, Cal Fire, Northern Region Tehama County Environmental Health and California Highway Patrol (CHP). The TCTC will collaborate with Caltrans District 2 to ensure that the roadway and its connection to Caltrans property are intelligently designed to ensure safe and accessible access to the reconstructed road. Caltrans and Cal Fire will review potential concepts to assess their efficacy for evacuation and daily functional use while following Caltrans standards. The proposed improvements will connect to a Caltrans operated Park & Ride facility, to maximize the benefits of its connection to the proposed shared-use path, coordination with Caltrans District 2 and California Highway Patrol (CHP) will be a conducted.

4.

Coordination with emergency management personnel is essential to project development and ensures that emergency services can access the roadway during an emergency event in an organized and safe fashion. Partnership between the TCTC, Tehama County and Cal Fire departments will be conducted and both agencies will be requested to review the project plans to provide pertinent feedback regarding evacuation safety standards and best practices for emergency service access. Planning and environmental review are required for this project and the California Department of Fish and Wildlife (DFW), California Environmental Protection Agency (EPA) and other relevant environmental agencies will be engaged with prior, during and after the environmental review process. The project team will solicit coordination from the Tehama County Housing Department to provide feedback on projected development and consider current and future roadway capacity in the project planning.

5.



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The County has identified the Lake California Drive REAP as a top priority project. This project will require partnership and collaboration throughout each project phase between residents, community organizations, County, state, and federal agencies. Partnerships between environmental regulatory agencies such as DFW and EPA will be established throughout all project phases. DFW and EPA will be responsible for ensuring that the project does not contribute to any adverse environmental effects. Cal Fire, Caltrans District 2, CHP, and the Tehama County Sheriff's Office are essential stakeholders to ensure the safety, efficiency, and accessibility of the project while following State and County regulations. The TCTC and project team will coordinate with Caltrans and CHP to solicit feedback to ensure the project aligns with updated design, safety standards and guidelines. Feedback from partner agencies is essential at all project phases to support the construction of a safe, effective, and reliable roadway.

Criteria #5: Equity and Justice

1.

Through the Lake California Drive Resiliency and Emergency Access Project (REAP), the TCTC intends to examine Lake California Drive to identify the most appropriate facilities to serve the existing population, while comprehensively removing hazards to create a recovery zone for the safe movement of pedestrians and vehicles during an emergency. Lake California Drive, a two-laned corridor, is the single ingress and egress point for the Lake California neighborhood; a private rural community that spans approximately 5,950 acres and home to over 4,000 residents. Of the residents, 31% of the population are 150% below the federal poverty level according to the Climate and Economic Justice Screen Tool provided by the U.S. DOT (Attachment 6). This is important to note as the average response time for medical emergencies in the Lake California community is approximately 20 minutes, and often requires an air ambulance to transport residents to emergency facilities. Due to Lake California's current roadway design, an already disadvantaged community is left to offset the financial burden by purchasing air medical transport insurance which is not typically covered by traditional insurance. With a tailored project scope, the Lake California community can reduce the financial impacts of emergency events by reconstructing Lake California Drive with a wider shoulder that will provide secondary access for critical community services such as EMT, the local police, and the fire department.

2.

The Lake California community is currently a study area in the Tehama County Secondary Access and Routing Study which aims to address transportation safety, mobility, and connectivity during emergency evacuations that will further meet goals within the Tehama County General Plan. An initial kickoff outreach meeting at the Lake California Property Owners Association (POA) was met with rich and quantifiable feedback from the community to ensure equitable considerations were made from the start of the Study's life cycle. These types of public engagement strategies will continue into the Lake California Drive Resiliency and Emergency



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Access Project life cycle through planned community and stakeholder meetings and events. These meetings will provide TCTC with an opportunity to engage with community-based organizations, community leaders, residents, and emergency service responders through a myriad of methods to gather diverse and applicable input to help the project team view the project with a lens of equity. These methods include utilizing a project page on the TCTC website, expanding the development of existing social media platforms, comprehensive questionnaires, and community and stakeholder events.

3.

The Lake California Drive REAP will offer improved project outcomes by promoting resilient operations for transformative, efficient, and cost-saving transportation development on Lake California Drive. These targets will reduce vulnerability and risk for residents and benefit the overall project by developing a comprehensive strategy for addressing natural and unplanned emergency events in Lake California. These strategies will allow for the swift evacuation of rural residences, farms and ranches that depend on Lake California Drive for safe evacuation. Specific roadway modifications such as shoulder widening, improved lighting, and the installation of a multi-use shared path will reduce impacts of emergency events by providing adequate facilities for authorized personnel during emergency responses and evacuations in Lake California. The Lake California REAP is critical to the community as it will address immediate concerns for expanded egress and ingress points, as Lake California Drive is a primary entry and exit for residents and visitors of Lake California. As the single egress and ingress point, small roadway accidents can result in hour long delays, further exacerbating an already limited roadway network. The Lake California REAP improvements will provide residents of Lake California and neighboring communities with adequate evacuation route conditions that will increase the emergency response window and evacuation time. The Lake California Drive REAP can reduce current or potential burdens for travel by immediately improving roadway safety through specific design elements. The overall design of the Lake California REAP will address Lake California Drive's current vulnerabilities in poor ingress/egress points, insufficient emergency service accessibility, and the lack of non-motorized facilities available for residents of Lake California. Aside from acting as a safe evacuation route, Lake California Drive also provides access to Interstate-5 and neighboring communities of Cottonwood, Redding, and Red Bluff. These communities provide Lake California residents with critical access to medical and educational facilities, local retail, expanded employment areas, and public transit services such as TRAX, which are difficult to access without a vehicle and a reliable transportation network. By improving infrastructure limitations on Lake California Drive, residents and visitors of Lake California can easily and equitably access an alternative mode of transportation that expands their local transportation network and improve access to resources and the overall quality of life of residents in Lake California.

4.



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According to the Climate and Economic Justice Screen Tool provided by the U.S. Department of Transportation, the Lake California Drive project is located within a Transportation Disadvantaged Census Tract because it meets more than 1 burden threshold and the associated socioeconomic threshold. The screening tool indicates that the project receives a Resilience Disadvantage Indicator as it is designated a 100% Transportation Disadvantages Site in a Historically Disadvantaged Community (Attachment 7). Considering these factors, the benefits of the Lake California Drive Resiliency and Emergency Access Project will entirely target disadvantaged communities.

Criterion #6: Climate Change and Sustainability

1.

The Lake California Drive REAP uses carbon reduction strategies, such as Transportation Demand Management (TDM) to improve the transportation system. TDM strategies incentivize less vehicle trips and support higher occupancy modes of travel, reducing the demand for single vehicular travel on roadways. This project promotes the use of alternative transportation modes such as walking, biking, transit, and rideshare through the incorporation of shared-use paths and increasing access to an existing TRAX transit stop or rideshare at an existing Caltrans Park & Ride facility. Transit riders that live in Lake California and nearby rural residences currently do not have a safe connection to the Tehama Rural Area eXpress (TRAX) transit stop on Bowman Road. The implementation of a shared-use path will promote the use of alternative transportation methods while increasing benefits to mental, physical, and environmental health. Through the facilitation of alternative transportation modes to access prime destinations surrounding Lake California, Vehicle Miles Traveled (VMT) will be reduced by decreasing the total number of vehicles on the road and the length of vehicle trips, therefore reducing greenhouse gas emissions (GHG).

2.

The resilience of Lake California, Cottonwood Creek Ranch and rural residences that rely on Lake California Drive is dependent on properly preparing and educating the community on natural hazards such as wildfires. California has an increasingly high fire risk throughout the state as extreme weather more often and severe. The TCTC recognizes this risk and are currently developing the Tehama County Secondary Access & Evacuation Routing Study to assess evacuation barriers for vulnerable communities in the County. The Study has identified wildfire risks to Lake California and surrounding rural residences and are considering it as a vulnerable community due to limited ingress/egress, designation in a High Fire Severity Zone (HFHSZ), size of the community, and previous wildfire history. The Study is utilizing a combination of fire prediction models, Geographic Information System (GIS) source layers, weather information, traffic and collision data, and historical hazardous incidents to predict the movement and congestion of traffic during an evacuation. The findings from this analysis will be used to develop facility recommendations for the Lake California Drive Resiliency and Emergency Access Project (REAP) and other evacuation routes in vulnerable Tehama County communities. The current ingress/egress point of Lake California Drive is not wide enough to accommodate



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the evacuation of the existing community and will not be suitable for potential population growth in conjunction with the entrance of emergency response vehicles. Expanding the roadway with a shared-use path will increase resiliency, safety, the speed of emergency response, minimize traffic flow interruptions, reduce fatalities and injuries in a High Fire Hazard Severity Zone (HFHSZ). Additionally, increasing resiliency now through the proposed infrastructure improvements will reduce the potential need for emergency relief efforts and funding in the future.

3.

The TCTC will reduce the lifecycle of greenhouse gas emission (GHG) from applicable project material by providing incentives to construction consultants during procurement that utilize low carbon materials. Additionally, TCTC will ensure project materials reduce GHG emissions based on manufacturing, installation, maintenance and proper material disposal.

4.

Lake California and the surrounding rural residences, including the project area, are located within a Disadvantaged Community (DAC). This project does not create any additional burden to the community as it does not bisect any residential or commercial area and it will not increase transportation through these areas due to its primary use by residents from Lake California, Cottonwood Creek Ranch, farms and other rural residences. This project directly aims to mitigate the negative environmental impacts of high fire risk and improve upon the current evacuation route. Equity considerations for underserved communities will be integrated throughout all project stages by utilizing continuous, robust community engagement. The project area is not within a FEMA Floodplain and therefore Federal Flood Risk Management Standards are not applicable.

5.

The development areas for the Lake California Drive REAP are not within protected areas of the California Protected Areas Database (CPAD) and California Conservation Easement Database. The project area is also not in a FWS HQ ES Critical Habitat location. The new shared-use path is being built adjacent to the existing roadway to limit and mitigate unnecessary habitat disturbance. A proper environmental review will be conducted, and best practices will be used to ensure minimal adverse environmental effects occur.

Criterion #7: Schedule and Budget

1.

The Lake California Drive REAP has only undergone preliminary-design work but will be construction ready at the time of award, if selected. The Lake California REAP application includes a detailed and thorough schedule of major project activity including PE, R/W and CON (Attachment 3). The project schedule includes major project activity and anticipated completion of milestones and deliverables. PE activities include preliminary engineering and architecture.



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TCTC is confident that the project will not require R/W due to the realignment of the roadway being within County jurisdiction. The project schedule can be seen below in Table 1.

Table 1.

	FY 2025/26						FY 2026/27																		
Task Title	J	A	s	0	N	D	J	F	м	A	м	J	J	Α	s	o	N	D	J	F	м	A	M	J	J
PE																									
R/W																									
CON																									

2.

The funds from the PROTECT Discretionary Grant Program, if awarded, will be solely used for resilience related improvements and project components. The attached project budget includes detailed incremental cost of resilient transportation assets. Project components that are not inherently resilience-focused, including additional Title 23 programs, will be funded by TCTC's 20% match of CMAQ funds.

3.

The detailed budget SF424C_2_0-V2.0 (more simplified budget and schedule included as Attachment 3) includes the total project cost, additional funding sources and amounts, including requested PROTECT Discretionary Grant Program funds. The TCTC is requested 80% of Federal funds through the PROTECT program and providing a 20% match from CMAQ funds.

4.

The above project schedule (Table 1) presented in the application includes anticipated start and end dates for each major activity. The anticipated project start will be in Fiscal Year 2025/2026 and construction will conclude in Fiscal Year 2026/2027.

5.

The proposed project schedule and budget are feasible, reasonable and align with the work described in the application.

Criterion #8: Innovation



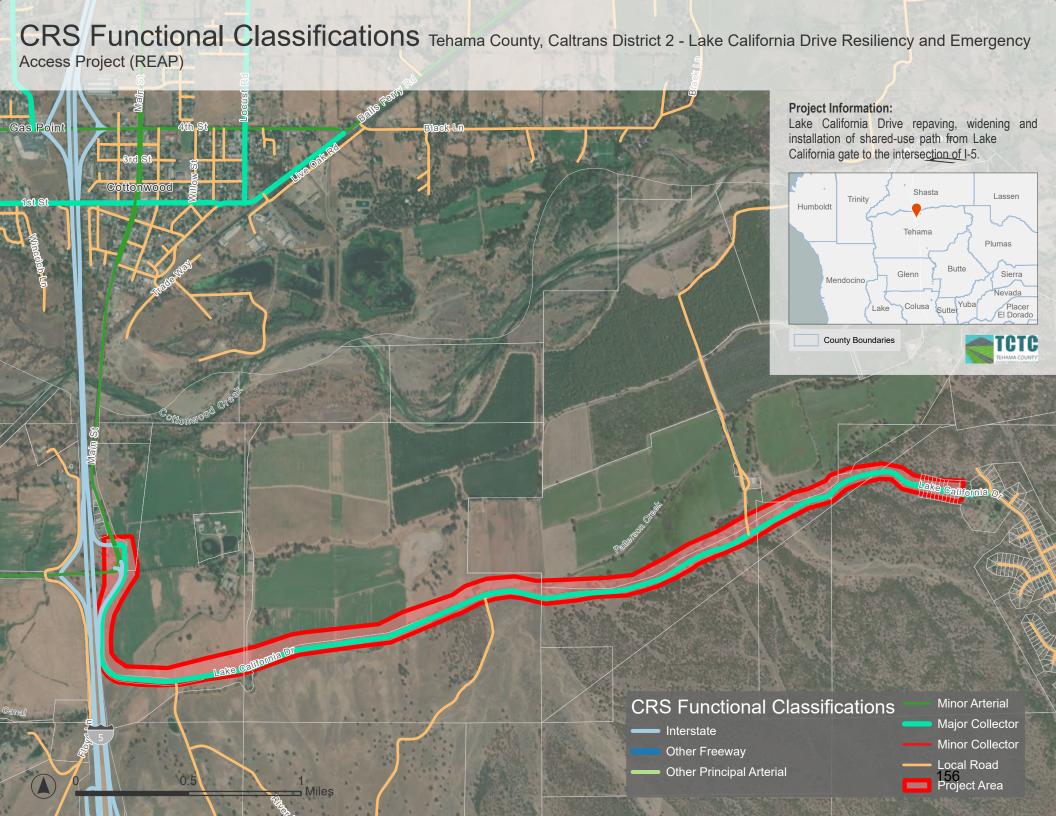
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The Lake California Drive REAP will increase the reliability of surface transportation through roadway reconstruction and several surface improvements including improved ingress/egress, shoulder widening and a shared use path that will also serve as an emergency access lane. The proposed improvements will increase the anticipated future service capabilities and extend the service life of Lake California Drive by improving upon existing facilities and enhancing capacity and mobility along the corridor. The shared use path will serve a dual purpose by providing a protected corridor to allow active transportation users to travel safely and efficiently and providing an alternate lane for emergency vehicles to travel efficiently to avoid disrupting traffic flow.

The project area is not in a riparian zone. The proposed project will consider and implement appropriate nature-based solutions where it is deemed necessary preserving oak trees and other sensitive species. The project area is rural in nature and currently there are no proposed landscape components of the project.

The proposed project will utilize best practices and partnerships with partner agencies and organizations through environmental, outreach, design and construction phases. TCTC has longstanding relationships with key stakeholders and will coordinate with pertinent natural resource management agencies such as Tehama County Environmental Health, California DFW, EPA. The TCTC has led many collaborative efforts with local, state, and federal agencies and will apply partnership skills throughout the entire project.

California is at increasing risk of fire with excessive fuel loads caused by increased temperatures and extreme drought conditions. Fires are becoming increasingly difficult to prepare for, predict and extinguish, increasing the reliance on strong evacuation routes that are essential to the safety of rural communities. The REAP project has been identified by the Tehama County Secondary Access & Evacuation Routing Study project team as a prime location to use innovative road reconstruction strategies to improve infrastructure resilience. Lake California Drive is currently a two-way two-lane roadway that is the only ingress or egress for residents of Lake California and several other communities. This causes severe concern for residents and officials, as there is currently no alternative emergency access lane or way to alleviate traffic flow during an emergency. To prevent a bottleneck situation during an evacuation, this project proposes to implement a shared path for emergency services to utilize during an evacuation so evacuees can use both roadway lanes. During daily use, however, the shared use path will be utilized by bicyclists and pedestrians for utilitarian or recreational purposes, therefore enhancing equitable access to reliable alternative transportation. Rural communities across Tehama County and California with one ingress-egress point can implement this same innovative strategy that both reduces greenhouse gas emissions and car dependence while increasing community safety and resilience. TCTC will apply this solution for other appropriate projects within the County and will share its successes with other rural agencies that suffer similar dilemmas. This solution is beneficial compared to proposing an additional roadway that supports increased car usage through induced demand. The proposed design and configuration provide an opportunity for the local community to receive additional egress for hazard events, active transportation health benefits, increase connectivity to multi-modal options and reduce vehicle dependency.







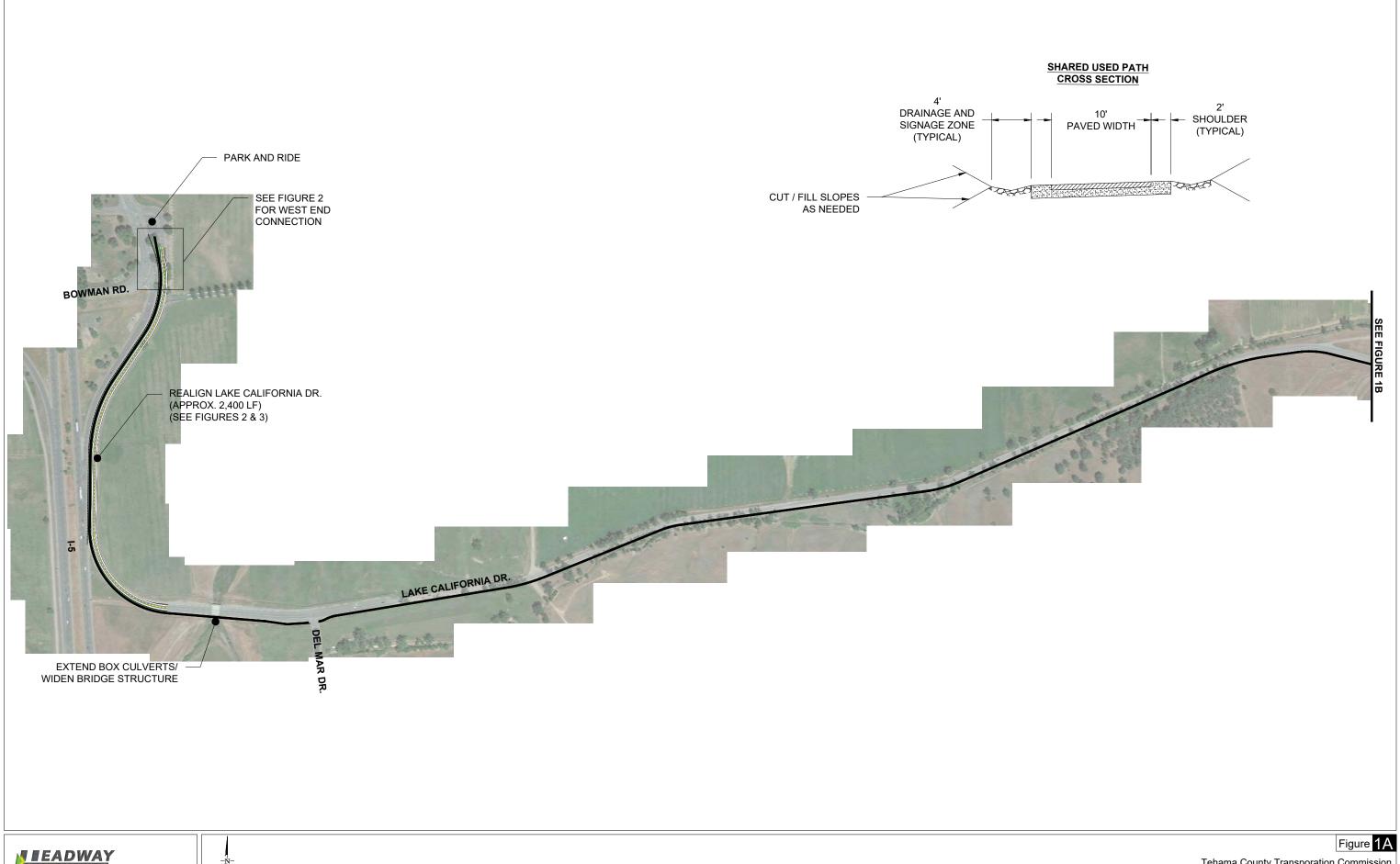
Historically Disadvantaged Communities

^	1

Rosewood

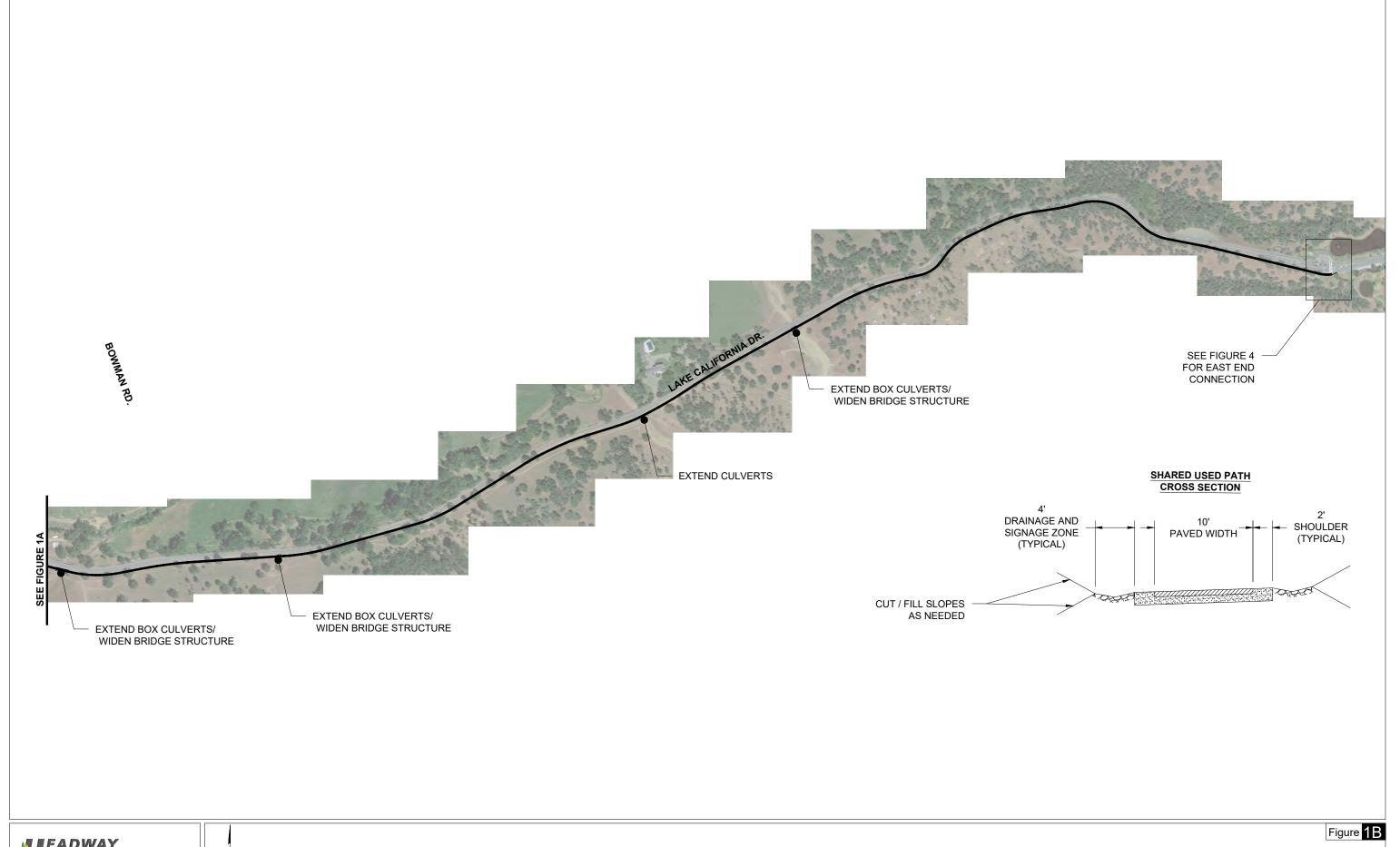
Census Tract Description	Census Tract 2, Tehama County California
Historically Disadvantaged Community (no, 0; yes, 1)	1
Transportation Disadvantage Indicator (no, 0; yes, 1)	1
Health Disadvantage Indicator (no, 0; yes, 1)	1
Economy Disadvantage Indicator (no, 0; yes, 1)	1
Equity Disadvantage Indicator (no, 0; yes, 1)	0
Resilience Disadvantage Indicator (no, 0; yes, 1)	1
Environmental Disadvantage Indicator (no, 0; yes, 1)	0

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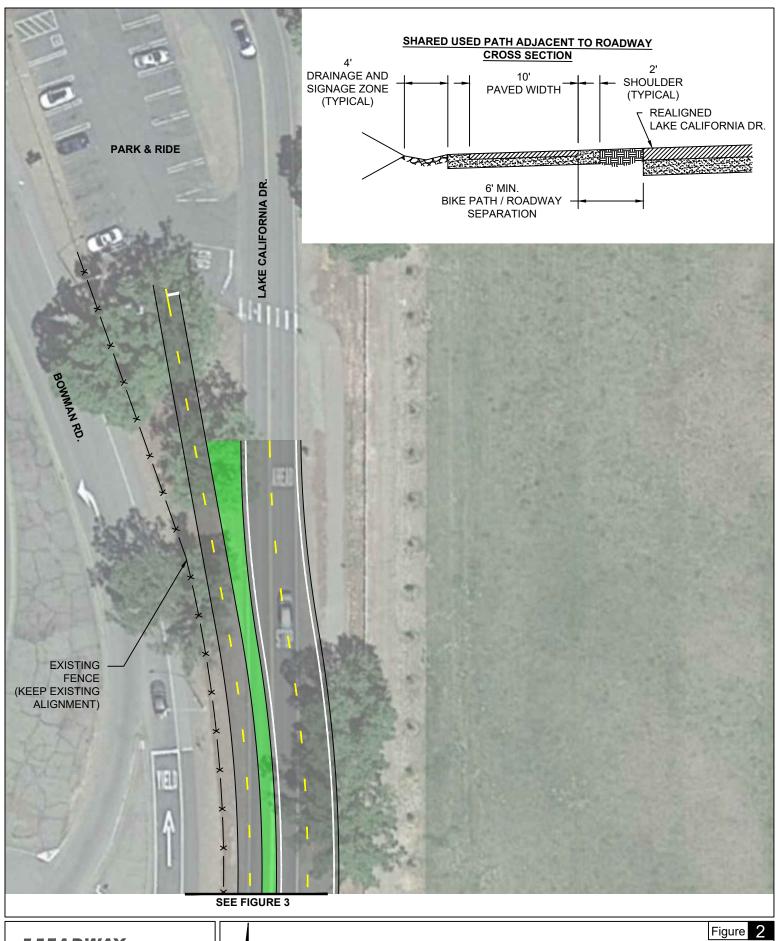




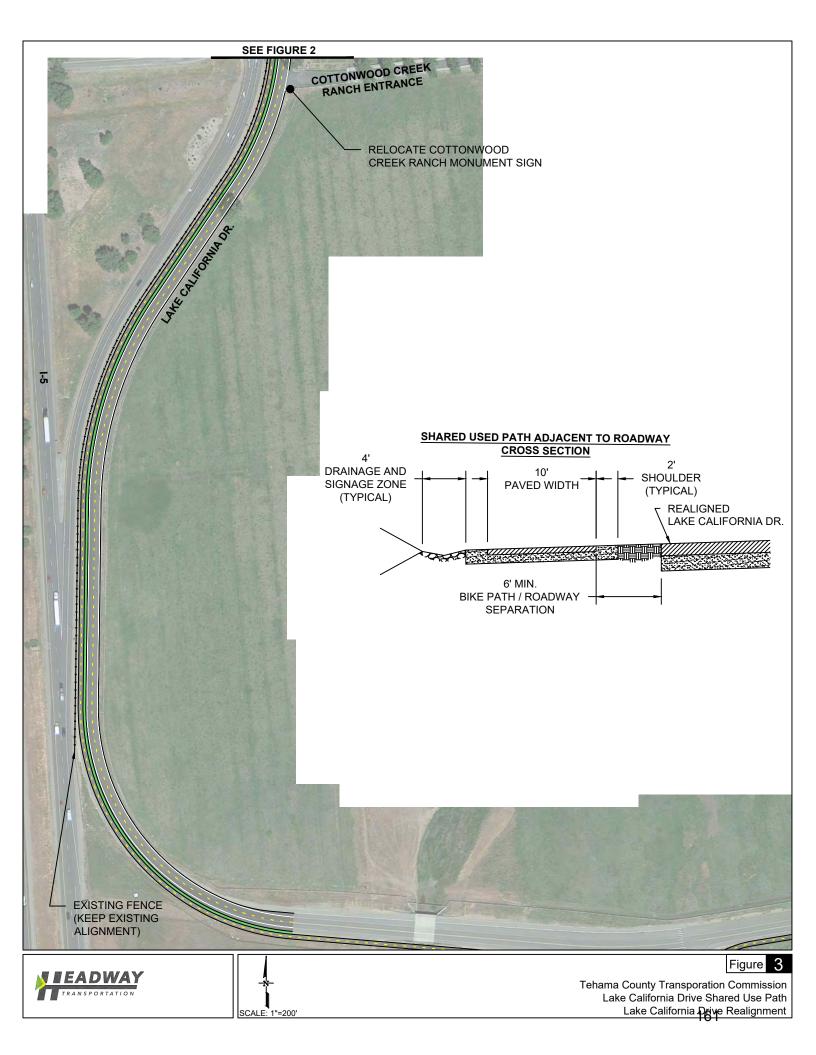


















			FY 2	025/	26								FY 2026/27											
Task Title	J	А	s	0	N	D	J	F	М	Α	М	J	J	А	s	o	N	D	J	F	М	А	М	J
PE																								
R/W																								
CON																								

Tehama County 2023 PROTECT GRANT BUDGET

LAKE CALIFORNIA DRIVE RESILIENCY AND EMERGENCY ACCESS PROJECT (REAP)

Task	k Funding Source/Type		Federal (80%)	Non-Federal (20%)	Estimated Total Project		
#	Task Title	PROTECT Funds Requested		Local Match- (CMAQ Funds)	Cost		
1.0	PE	\$	1,000,000.00	\$ 250,000.00	\$ 1,250,000.00		
2.0	R/W	\$	-	\$ -	\$ -		
3.0	CON	\$	8,264,000.00	\$ 2,066,000.00	\$ 10,330,000.00		
	Totals	\$	9,264,000.00	\$ 2,316,000.00	\$ 11,580,000.00		

Lake California Drive Resiliency and Emergency Access Project (REAP)

Benefit-Cost Analysis Technical Memo

FY 2023 PROTECT Discretionary Grant Program

Prepared for Tehama County Transportation Commission

August 2023

Introduction

A benefit-cost analysis (BCA) was conducted for the Tehama County Transportation Commission for the Lake California Resiliency and Emergency Access Project. This submission to the U.S. Department of Transportation (U.S. DOT) is intended to fulfill the requirements of a discretionary grant program for the PROTECT grant program.

Project Description

Lake California Drive is a public major collector roadway in rural northern Tehama County, California. Lake California Drive is an approximate five (5) mile stretch of road that begins at the Bowman Road interchange off Interstate-5 (I-5) at Exit 662 and ends within the rural community of Lake California at the intersection of Rio Alto Drive. Currently, Lake California Drive is a narrow two-lane roadway and is the only publicly available roadway to enter and exit Lake California and rural residences including Cottonwood Creek Ranch, farms and ranches. Lake California Drive also provides the only paved access to Del Mar Drive and Emerald Downs Lane which connect to rural homes south of Lake California Drive near the North and South Fork of Patterson Creek. Lake California is the furthest community that the roadway serves and is approximately five (5) miles east of Interstate 5 (I-5), six (6) miles southeast of Cottonwood and on the western bank of the Sacramento River. Additionally, Lake California Drive's proximity to I-5 provides the rural community of Lake California and nearby residences with convenient access to Cottonwood, recreational destinations, schools, employment, medical, and retail centers.

During emergency events, the roadway has been shut down in both traffic directions to provide ingress/egress for emergency services. The lack of adequate ingress/egress for emergency services has resulted in prolonged periods of stopped traffic for residents of Lake California, Cottonwood Creek Ranch and rural residences south of Lake California Drive before being able to enter or exit their community. The current configuration of Lake California Drive does not address the recommended improvements outlined in the 2020 Tehama County Regional Transportation Plan (RTP) for shoulder widening and the implementation of a safe Class IV facility. Additionally, Tehama County is currently in the report development phase of the countywide Secondary Access & Evacuation Routing Study, which will assess numerous vulnerable communities within Tehama County, including Lake California and surrounding rural residences, and develop recommendations for roadway improvements to improve evacuation resilience and efficiency.

The Lake California Drive REAP would span approximately three and a half (3.5) miles, beginning at Bowman Road and Lake California Drive intersection, connect to an existing Caltrans Park & Ride facility and conclude at the Bowman Road and Lake California Drive intersection. The proposed implementation of a shared-use path will provide bicyclists, pedestrians, and emergency responders with a safe additional ingress/egress route. The shared-use path will also provide a safe facility for pedestrians and bicyclists to utilize daily, promoting active transportation benefits, providing critical connections to transit and rideshare options and reducing vehicles on the roadway. During emergency events, the shared-use path can be utilized by emergency responders to mitigate traffic delays and decrease emergency response time to hazards. The proposed shared-use path would begin at the Lake California entry gate, connect to an existing Class IV facility at Del Mar Drive, extend and conclude at the Bowman Road intersection. The project would improve roadway safety for all transportation modes, reduce traffic congestion particularly during hazards, provide necessary access for emergency services and

promote the use of non-motorized transportation. These improvements would allow residents, visitors, and emergency services to commute, recreate and respond to and from Lake California and nearby rural residences with efficiency and safety.

Project Assumptions

For the completion of this BCA, the analysis period includes the construction period (2025/26) during which the capital expenditures will be expended as well as the expected service life of the project which is expected to be 20 plus years. Following the construction period, expected benefits and operating costs will be incurred during the service life of the completed project.

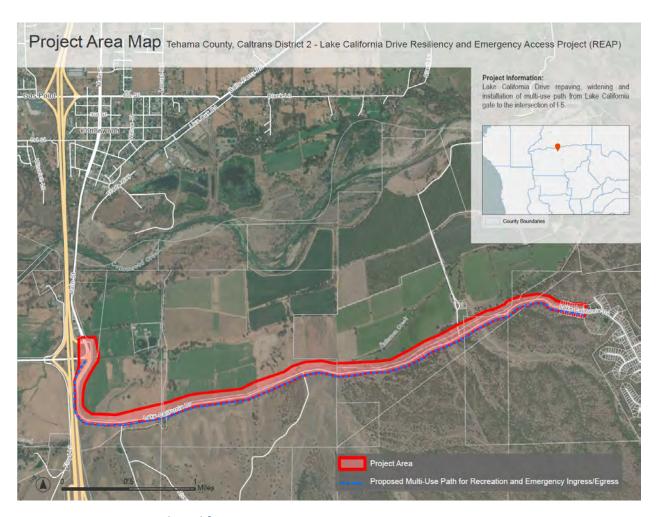


Figure 1. Project Area: Lake California Drive

For the purposes of this project, construction will begin in 2025 with project completion planned for mid-2026. Therefore, the 20-year analysis period concludes in 2045.

Benefits and costs associated with the project are assumed to occur at the end of each analysis year and are expressed in constant, year-end 2023 dollars (project base year). The real discount rate of 7.0

percent is used to discount benefits and costs incurred in future years relative to the baseline analysis year. ¹

Project Costs

Capital Costs

The capital costs of the project include costs related to project inspection fees, environmental, design, construction, miscellaneous fees, and contingencies. Table 1 shows the project costs which amount to \$11.58 million in the construction year.

Tehan	na County 2023 PROTECT GR								
LAKE C	ALIFORNIA DRIVE RESILIENCY AND	PRO	JECT (REAP)						
Task	Funding Source/Type		Federal (80%)	Non-Federal (20%)			Estimated Total Project		
#	Task Title	ļ	PROTECT Funds Requested		Local Match- (CMAQ Funds)	Cost			
1.0	PE	\$	1,000,000.00	\$	250,000.00	\$	1,250,000.00		
2.0	R/W	\$		\$	1	\$	-		
3.0	CON	\$	8,264,000.00	\$	2,066,000.00	\$	10,330,000.00		
	Totals	\$	9,264,000.00	\$	2,316,000.00	\$	11,580,000.00		

Table 1: Capital Costs in Undiscounted 2023 Dollars

Project Benefits

Evaluation Criteria

Monetary values from the calculated costs and benefits are compared to complete the analysis of the planned project. The following benefit-cost evaluation measures were used in this analysis:

- Net Present Value (NPV): compares the net benefits (benefits minus costs) after discounting to present values using the real discount rate assumption.
- Benefit Cost Ratio (BCR): Estimates a ratio between the benefits and costs by dividing the present value of incremental benefits by the present value of incremental costs.

The benefits from the project that were analyzed include Safety, closure reduction benefits, and improved accessibility benefits. The following table defines the total project benefits over the lifespan of the project at \$46,938,393.

Benefits		Project Op	eni	ng year	Project Lifecycle (20 year)			
	U	Indiscounted	Dis	scounted at 7%	ι	Jndiscounted	Di	scounted at 7%
Time Savings Benefit: Closures and Hazard Events	\$	2,320,080.00	\$	2,168,299.07	\$	46,401,600.00	\$	43,365,981.31
Accessibility Benefit: Pedestrian Facilities Multi-Use Path	\$	9,198.00	\$	8,596.26	\$	183,960.00	\$	171,925.23
Accessibility Benefit: Cycling Facilities Multi-Use Path	\$	17,641.91	\$	16,487.77	\$	352,838.20	\$	329,755.33
Safety Benefit: Improved Roadway Safety	\$	622,930.00	\$	582,177.57	\$	12,458,600.00	\$	11,643,551.40
Total Cost Savings from Project Components	\$	2,346,919.91	\$	2,193,383.09	\$	46,938,398.20	\$	43,867,661.87
Benefit Cost Ratio		0.20				4.05		

Analysis Notes:

- 1. Time Savings Benefit is based on historical road closures per collision history and travel cost per hour as extracted from the 2021 Urban Mobility Report, Appendix C Value of Delay Time for Use in Mobility Monitoring Efforts, June 2021, Infrastructure Analysis Program, Texas A&M Transportation Institute.
- 2. Accessibility benefits for adding bicycle and pedestrian facilities are based on metrics established in the USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs, Office of the Secretary, March 2022.

Costs													
Preliminary Engineering		\$ 1,250,000.00											
Project inspection fees		\$ 1,400,000.00											
Demolition and Removal		\$ 150,000.00											
Construction		\$ 6,850,000.00											
Contingencies		\$ 1.930,000.00											
Total Project Costs		\$ 11,580,000.00											
Benefits	:	Value		Pro	oject Opening year		Proje	ct Lifecycle (20 year	r)	Year			Property Rationale damage
			Baseline	Annual Averages	Undiscounted D	iscounted at 7%	Annual Average number of crashes	Undiscounted	Discounted at 7%				
Time Savings Benefit: Closures and Hazar		\$ 55.24		42000 \$	2,320,080.00 \$	2,168,299.07	840000.0 \$	46,401,600.00	\$ 43,365,981.31	2026	1	1.8	20.3 Travel cost per vehicle hour. Expected savings based on reduced lane closure history. Metric taken from American Transportation Institute 2021 Study (see supporting documents).
Accessibility Benefit: Pedestrian Facilities	s Multi-Use Path	\$ 3.60		2555 \$	9,198.00 \$	8,596.26	51100.0 \$	183,960.00	\$ 171,925.23	2027	2	1.7	19.9 Adding the multi-use path to Lake Ca. Drive is exptected to induce 3-7 bicycle trips per day.
Accessibility Benefit: Cycling Facilities Mi		\$ 3.72		4745 \$	17,641.91 \$	16,487.77	94900.0 \$	352,838.20	\$ 329,755.33	2028	3	1.7	19.5 Adding the multi-use path to Lake Ca. Drive is expected to induce 10-13 walking trips per day.
Safety Benefit: Improved Roadway Safet	ty			22.05 \$	622,930.00 \$	582,177.57	441.0 \$	12,458,600.00	\$ 11,643,551.40	2029	4	1.6	19.1
Total Cost Savings from Project Compon	nents			\$	2,346,919.91 \$	2,193,383.09	\$	46,938,398.20	\$ 43,867,661.87	2030	5	1.6	18.7
Benefit Cost Ratio					0.20			4.05		2031	6	1.6	18.3
Safety Benefit Details										2032	7	1.5	17.9
Injuries		\$ 302,600		1.75 \$	529,550.00 \$	494,906.54	35.0 \$	10,591,000.00	\$ 9,898,130.84	2033	8	1.5	17.6
Property Damage Only		\$ 4,600		20.3 \$	93,380.00 \$	87,271.03	406.0 \$	1,867,600.00	\$ 1,745,420.56	2034	9	1.5	17.2
										2035	10	1.5	16.8
										2036	11	1.4	16.5
										2037	11	1.4	16.5
										2038	12	1.4	16.2
					0.05	0.58				2039	13	1.4	15.8
					1.75	20.3				2040	14	1.3	15.5
										2041	15	1.3	15.2
										2042	16	1.3	14.9
										2043	17	1.3	14.6
Benefit of new cyclist (per)		128								2044	17	1.3	14.6
										2045	19	1.2	14.0
										2046	18	1.2	14.3
										2047	20	1.2	13.7
										2048	21	1.2	14.0
										2049	21	1.2	13.4
										2050	22	1.1	13.1
													407.2
													100.100

California Department of Transportation

OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 | SACRAMENTO, CA 94273-0001 (916) 654-6130 | FAX (916) 653-5776 TTY 711 www.dot.ca.gov





August 18, 2023

The Honorable Pete Buttigieg Secretary of the United States Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Dear Secretary Buttigieg:

The California Department of Transportation (Caltrans) supports the application of the Tehama County Transportation Commission (TCTC) to the United States Department of Transportation (USDOT) Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Discretionary Grant Opportunity for Fiscal Year 2023 and 2024 for the Lake California Drive Reconstruction Project (Project).

The TCTC seeks PROTECT funding for construction costs. The Project, located at Lake California Drive, is planned to provide the community of Lake California with additional ingress/egress for emergency services and safe non-motorized facilities. Lake California Drive is a narrow two-lane roadway and is the only access route in and out of the rural community of Lake California. Numerous reported incidents of roadway traffic being halted to a standstill in both directions during a traffic emergency to provide limited emergency service access. Implementing a multi-use path that emergency services can utilize is set to address the community's need for additional ingress/egress.

The Project fulfills PROTECT's goals of providing Lake California with a reliable and safe roadway during emergency events to improve community preparedness while reducing the risk of injuries or fatalities.

Caltrans would like to thank USDOT for its consideration of this Project.

Sincerely,

TONY TAVARES

Director

Board of Supervisors COUNTY OF TEHAMA



Gabriel Hydrick Chief Administrator

District 1 – Bill Moule
District 2 – Candy Carlson
District 3 – Pati Nolen
District 4 – Matt Hansen
District 5 – John Leach

Jessica Riske-Gomez
Deputy Director Public Works - Transportation
Tehama County Transportation Commission
1509 Schwab Street
Red Bluff, CA 96080

Subject: Support for the Tehama County Lake California Drive Improvement Project

Dear Ms. Riske-Gomez,

The County of Tehama Board of Supervisors strongly supports the Tehama County Transportation Commission's Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant application to implement roadway improvements to Lake California Drive. These improvements would provide the community of Lake California with additional ingress/egress for emergency services and evacuation, increase shoulder width, improve existing non-motorized facilities and overall roadway safety for residents, visitors and emergency services.

Lake California Drive is the only roadway that provides access in and out of Lake California, a rural community in northern Tehama County. Lake California is a gated community, approximately five (5) miles east of I-5, six (6) miles southeast of Cottonwood and on the western bank of the Sacramento River. Currently, Lake California Drive is a narrow two-lane roadway and is the only access route for the Lake California community. There have been numerous incidents of roadway traffic being halted during a traffic emergency and both lanes being required to shut down to provide access for emergency services.

Lake California Drive is the only connection to I-5 that residents have which supplies access to the neighboring community of Cottonwood, additional services, employment centers and schools. Lake California Drive also provides a direct route to a Park & Ride facility at the Bowman Road and Lake California Drive intersection. While Lake California Drive is not in a deteriorative state, it does not address the recommended improvements outlined in the Tehama County General Plan such as increased ingress/egress, shoulder widening and protected bicycle and pedestrian facilities. Through multiple outreach events, residents have repeatedly requested that the appropriate improvements be made to Lake California Drive so that they can feel safe knowing a reliable and efficient route is available for hazard events.

The proposed improvements would span approximately three and a half (3.5) miles from the entry/exit gate of the Lake California community to the Park & Ride facility at Bowman Road. These

improvements would allow residents, visitors and emergency services to commute, recreate and respond to and from Lake California with efficiency and safety. The proposed implementation of a multi-use path would provide additional ingress/egress that can be utilized by emergency services and residents during hazard events while being enjoyed by bicyclists and pedestrians. The proposed multi-use lane would begin at the Lake California entry gate, connect to an existing Class IV facility at Del Mar Drive, extend and conclude at the Bowman Road Park & Ride. Additionally, the Lake California Drive improvements would improve traffic safety, reduce traffic congestion particularly during hazards, provide necessary access for emergency services and promote the use of non-motorized transportation.

The proposed improvements would be transformational for Tehama County and the community of Lake California. Thank you for the opportunity to support this important project.

Sincerely

William Moule, District 1, Chairman

TEHAMA COUNTY TRANSPORTATION COMMISSION RESOLUTION NO. 09-2023

AUTHORIZING SUBMISSION OF THE APPLICATION FOR THE PROMOTING RESILIANT OPERATIONS FOR TRANSFORMATIVE, EFFICENT, AND COST-SAVING TRANSPORTATION PROGRAM

FY2023/24

WHEREAS, the U.S. Department of Transportation is authorized to make grants for states to support capital projects under "H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act." November 15, 2021 (Public Law 117-58); and

WHEREAS, the federal Infrastructure Investment and Jobs Act of 2021 (IIJA) (Public Law 117-58) which created a new resilience formula program, the Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT). The PROTECT Program provides California with approximately \$252.5 million dollars over five years through 2026 with funds for resilience improvements that protect surface transportation assets.; and

WHEREAS, the Community Resilience and Evacuation Route activities that strengthen and protect evacuation routes are essential for providing and supporting evacuations caused by emergency events, including: resilience improvements if they will improve evacuation routes, and projects to ensure the ability of the evacuation routes to provide safe passage during an evacuation and reduce the risk of damage to evacuation routes as a result of future emergency events [23 United States Code 176(d)(4)(B)]; and

WHEREAS, the Tehama County Transportation Commission desires to apply for said financial assistance to develop and construct the Lake California Drive Reconstruction Project; **and**

WHEREAS, the Tehama County Transportation Commission has confirmation that the agency is eligible to apply.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED that the Transportation Commission does hereby authorize the Executive Director to file and execute applications on behalf of the Commission with the Department to aid in the development and construction of the Lake California Drive Reconstruction Project.

That the Executive Director is authorized to execute and file all certifications of assurances, contracts or agreements, or any other document required by the Department.

That the Executive Director is authorized to provide additional information as the Department may require in connection with the application for the PROTECT project.

That the Executive Director is authorized to submit and approve request for reimbursement of funds from the Department for the PROTECT project/s.

TEHAMA COUNTY TRANSPORTATION COMMISSION RESOLUTION NO. 09-2023

PASSED AND ADOPTED by the Transportation Commission of the County of Tehama, State of California, at a regular meeting of said Commission or Board Meeting held on the 26th day of June 2023 by the following vote:

AYES: Moule, Nolen, Long, Hurton, Demo

NOES:

ABSENT: Bacquet, Hansen

ABSENT OR NOT VOTING: STATE OF CALIFORNIA)

ss

COUNTY OF TEHAMA)

I, JENNIFER VISE, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California, hereby certify the above and foregoing to be full, true, and correct copy of an order adopted by said Tehama County Transportation Commission on this 26th day of June 2023.

BY:

Deputy

June 6, 2023

Jessica Riske-Gomez
Deputy Director Public Works - Transportation
Tehama County Transportation Commission
1509 Schwab Street
Red Bluff, CA 96080

Subject: Support for the Tehama County Lake California Drive Improvement Project

Dear Ms. Riske-Gomez,

Lake California POA strongly supports the Tehama County Transportation Commission's Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant application to implement roadway improvements to Lake California Drive. These improvements would provide the community of Lake California with additional ingress/egress for emergency services and evacuation, increase shoulder width, improve existing non-motorized facilities and overall roadway safety for residents, visitors and emergency services.

Lake California Drive is the only roadway that provides access in and out of Lake California, a rural community in northern Tehama County. Lake California is a gated community, approximately five (5) miles east of I-5, six (6) miles southeast of Cottonwood and on the western bank of the Sacramento River. Currently, Lake California Drive is a narrow two-lane roadway and is the only access route for the Lake California community. There have been numerous incidents of roadway traffic being halted during a traffic emergency and both lanes being required to shut down to provide access for emergency services. Due to the lack of adequate ingress/egress residents have been trapped for several hours in and out of their community due to increased response time for emergency services.

Lake California Drive is the only connector to I-5 that residents have which supplies access to the neighboring community of Cottonwood, additional services, employment centers and schools. Lake California Drive also provides a direct route to a Park & Ride facility at the Bowman Road and Lake California Drive intersection. While Lake California Drive is not in a deteriorative state, it does not address the recommended improvements outlined in the Tehama County General Plan such as increased ingress/egress, shoulder widening and protected bicycle and pedestrian facilities. Through multiple outreach events, residents have repeatedly requested that the appropriate improvements be made to Lake California Drive so that they can feel safe knowing a reliable and efficient route is available for hazard events.

The proposed improvements would span approximately three and a half (3.5) miles from the entry/exit gate of the Lake California community to the Park & Ride facility at Bowman Road. These improvements would allow residents, visitors and emergency services to commute,

recreate and respond to and from Lake California with efficiency and safety. The proposed implementation of a multi-use path would provide additional ingress/egress that can be utilized by emergency services and residents during hazard events while being enjoyed by bicyclists and pedestrians. The proposed multi-use lane would begin at the Lake California entry gate, connect to an existing Class IV facility at Del Mar Drive, extend and conclude at the Bowman Road Park & Ride. Additionally, the Lake California Drive improvements would improve traffic safety, reduce traffic congestion particularly during hazards, provide necessary access for emergency services and promote the use of non-motorized transportation.

The proposed improvements would be transformational for Tehama County and the community of Lake California. Thank you for the opportunity to support this important project.

Sincerely

Scott Nielsen

General Manager, CMCA, AMS

Lake California Property Owners Association (LCPOA)

19999 Lake California Drive

Cottonwood, CA 96022

O: (530) 347-7900

F: (530) 347-7902 snielsen@lakecalifornia.net

www.lakecalifornia.net



TEHAMA COUNTY SHERIFF'S OFFICE

Dave Kain, Sheriff-Coroner

Mailing Address: P.O. Box 729, Red Bluff, CA 96080

Main Office: Jail/Dispatch:

22840 Antelope Blvd., Red Bluff, CA 96080 502 Oak St., Red Bluff, CA 96080

(530) 529-7940 / (530) 529-7933 FAX (530) 529-7900 / (530) 528-7614 FAX

June 8th, 2023

Jessica Riske-Gomez
Deputy Director Public Works - Transportation
Tehama County Transportation Commission
1509 Schwab Street
Red Bluff, CA 96080

Subject: Support for the Tehama County Lake California Drive Improvement Project

Dear Ms. Riske-Gomez,

The Tehama County Sheriff's Office and County OES strongly supports the Tehama County Transportation Commission's Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant application to implement roadway improvements to Lake California Drive. These improvements would provide the community of Lake California with additional ingress/egress for emergency services and evacuation, increase shoulder width, improve existing non-motorized facilities and overall roadway safety for residents, visitors and emergency services.

Lake California Drive is the only roadway that provides access in and out of Lake California, a rural community in northern Tehama County. Lake California is a gated community, approximately five (5) miles east of I-5, six (6) miles southeast of Cottonwood and on the western bank of the Sacramento River. Currently, Lake California Drive is a narrow two-lane roadway and is the only access route for the Lake California community. There have been numerous incidents of roadway traffic being halted during a traffic emergency and both lanes being required to shut down to provide access for emergency services. Due to the lack of adequate ingress/egress residents have been trapped for several hours in and out of their community due to increased response time for emergency services.

Lake California Drive is the only connector to I-5 that residents have which supplies access to the neighboring community of Cottonwood, additional services, employment centers and schools. Lake California Drive also provides a direct route to a Park & Ride facility at the Bowman Road and Lake California Drive intersection. While Lake California Drive is not in a deteriorative state, it does not address the recommended improvements outlined in the Tehama County General Plan such as increased ingress/egress, shoulder widening and protected bicycle and pedestrian facilities. Through multiple outreach events, residents have repeatedly requested that the appropriate improvements be made to Lake California Drive so that they can feel safe knowing a reliable and efficient route is available for hazard events.

The proposed improvements would span approximately three and a half (3.5) miles from the entry/exit gate of the Lake California community to the Park & Ride facility at Bowman Road. These improvements would allow residents, visitors and emergency services to commute, recreate and respond to and from Lake California with efficiency and safety. The proposed implementation of a multi-use path would provide additional ingress/egress that can be utilized by emergency services and residents during hazard events while being enjoyed by bicyclists and pedestrians. The proposed multi-use lane would begin at the Lake California

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Professionalism, Respect, Integrity, Dedication, Equality

entry gate, connect to an existing Class IV facility at Del Mar Drive, extend and conclude at the Bowman Road Park & Ride. Additionally, the Lake California Drive improvements would improve traffic safety, reduce traffic congestion particularly during hazards, provide necessary access for emergency services and promote the use of non-motorized transportation.

The proposed improvements would be transformational for Tehama County and the community of Lake California. Thank you for the opportunity to support this important project.

Sincerely,

Andy Houghtby L179

Lieutenant and Deputy Director of County OES

Tehama County Sheriff's Office

City of Tehama

Incorporated 1906

Post Office Box 70

Tehama, CA 96090

Phone: (530) 384-1501

250 Cavalier Dr.

cityhall@cityoftehama.us

June 13, 2023

Jessica Riske-Gomez
Deputy Director Public Works - Transportation
Tehama County Transportation Commission
1509 Schwab Street
Red Bluff, CA 96080

Subject: Support for the Tehama County Lake California Drive Improvement Project

Dear Ms. Riske-Gomez,

The Tehama City Council strongly supports the Tehama County Transportation Commission's Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant application to implement roadway improvements to Lake California Drive. These improvements would provide the community of Lake California with additional ingress/egress for emergency services and evacuation, increase shoulder width, improve existing non-motorized facilities and overall roadway safety for residents, visitors and emergency services. Lake California Drive is the only roadway that provides access in and out of Lake California, a rural community in northern Tehama County. Lake California is a gated community, approximately five (5) miles east of I-5, six (6) miles southeast of Cottonwood and on the western bank of the Sacramento River. Currently, Lake California Drive is a narrow two-lane roadway and is the only access route for the Lake California community. There have been numerous incidents of roadway traffic being halted during a traffic emergency and both lanes being required to shut down to provide access for emergency services. Due to the lack of adequate ingress/egress residents have been trapped for several hours in and out of their community due to increased response time for emergency services. Lake California Drive is the only connector to I-5 that residents have which supplies access to the neighboring community of Cottonwood, additional services, employment centers and schools. Lake California Drive also provides a direct route to a Park & Ride facility at the Bowman Road and Lake California Drive intersection. While Lake California Drive is not in a deteriorative state, it does not address the recommended improvements outlined in the Tehama County General Plan such as increased ingress/egress, shoulder widening and protected bicycle and pedestrian facilities. Through multiple outreach events, residents have repeatedly requested that the appropriate improvements be made to Lake California Drive so that they can feel safe knowing a reliable and efficient route is available for hazard events.

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Sincerely,

Carolyn Steffan

City Clerk/Administrator



OUTREACH SUMMARY

There have been six (6) outreach events conducted by the project team to engage with the Tehama County community to encourage participation in the planning process of the Tehama County Secondary Access & Routing Study. Engagement opportunities are important ways of allowing County residents to provide input that is beneficial to project development. Over multiple days of outreach, the project team solicited feedback on areas of concern and recommended improvements for County residents. Various methods were utilized to receive the most equitable engagement including community meetings, individual stakeholder communications, a project specific website, questionnaire and an emphasis on social media advertisement. All outreach events are open to all County residents regardless of the community they live in.

The project team will be conducting two (2) community meetings and one (1) popup event in the near future to conclude the first round of outreach. The following table summarizes the outreach events for the first round of outreach events for the Secondary Access & Routing Study:

Tehama C	ounty Secondary Ac	cess & Routin	g Study
	Outreach Event	Table	
Event Type	Location	Date	Time
Community Meeting	Paskenta	March 23, 2023	5:30-7:00 PM
Community Meeting	Cottonwood/Bowman	April 4, 2023	5:00 - 6:30 PM
Pop-Up	Tehama County District Fair	May 4 - May 7, 2023	4:00 - 8:00 PM,
Ρορ-ορ	Terrama County District Fair	May 4 - May 7, 2025	12:00 - 8:00 PM
Community Meeting	Mineral	May 31, 2023	6:00 - 7:30 PM
Pop-Up	Manton Chili Cook-Off	June 10, 2023	10:00 AM - 3:00 PM
Community Meeting	Rancho Tehama	June 15, 2023	5:30 - 7:00 PM









STAKEHOLDERS

Stakeholders included Tehama County Transportation Commission (TCTC) staff, District Supervisors, County staff, California Highway Patrol (CHP) and Caltrans District 2.

COMMUNITY MEETINGS

The TCTC and project team hosted four (4) community meetings and tabled at two (2) pop-up events to introduce the Secondary Access & Routing Study and collect feedback from the community. The workshops were advertised and promoted to encourage community members to attend and provide input. Each meeting included a presentation introducing the Study, purpose of the Study, outreach process, funding challenges and community needs.

After the presentation, community members who were present at the meeting were given an opportunity to voice any concerns in their community or regarding the Study to the project team. Many community members took the time to identify areas of concern in their communities. In addition, sign-in sheets, maps, questionnaires and comment cards were made available at each meeting to provide further methods of obtaining community input.

The following sections are an overview of each of the outreach components and a summary of feedback received.

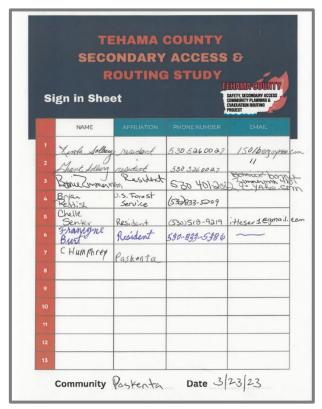








PASKENTA - MARCH 23, 2023 Attendance



Discussion Topics, Suggestions, & Questions

Verbal comments and questions received by the project team that were made by the Paskenta attendees are displayed in the table below:









Tehama County Secondary Access & Routing Study

Outreach Comments by Community Paskenta

Hard to get out of town if you don't have a truck

Bridge on Round Valley Road to Elk Creek is out from storm earlier this If you don't have a truck, you will not be able to get out of town.

I was here last fire, and it was not contained and lots of back burn.

We don't have much faith in government employees to share event and evacuation response.

Potential bridge out, bridge near Newville to Road 306. Newville road is closed and that gets you to Elk Creek, Stonyford and Willows. There is only one sign explaining road closed and does not specify where. If you go Newville to Orland, you can get to I-5.

The other day with a lot of rain at JW ranch, low road and needs to be built up because road floods and there is no drainage, so it comes off hills and spreads.

If you have a truck is only way to get through big puddles.

Went through flood not realizing how deep it was, could have been dangerous without truck.

Road is not stable enough by JW Ranch.

Some culverts in town need to be repaired.

Need to go through Flournoy and the bridge is always flooded.

Could go through Lowrey Road out of town.

Sheriff's department only open 2-3 times a week and is understaffed Old volunteer fire station had a large siren to alert for emergencies but Cell phone reception is rotten, and unreliable, doesn't matter carrier. Last power outage due to rain and wind, no Wi-Fi.

Last rain pushed gravel on roads towards shores and rises high due to lack of opening.

Local government will not come help.

We can coordinate with flood control district.

Threat of flooding and could close the bridge and bridge has been underwater before.

Park was recently flooded.

Never had to be evacuated but if we were we would not be able to get

Historically, in 1964- took bridge out, took about 2 years, southside of creek had to go around Black Butte every time wanted to go through

There was a lot of fire evacuation confusion, tried to provide info for people and did not have enough people to help. People here felt forgotten about, try to relay info to public information officers and fire spread really quick due to high winds.

Received help from crane mills and stated we were on our own and all local guys who were making fire break lines to get people out.

The bad thing about this situation is when Cal Fire describes roads they use specific roads names. People here only know actual street names or community members roads. Need a road naming system for everyone to understand.

Cannot find APN for flood maps, etc., hard to see and understand, not accessible.

When we hear alerts, cannot understand what anyone is saying because of radio slang and specific language, need something easy to understand.

People are active on Facebook or notifying community on hazards, etc. Neighborhood watch could be heading alerts, when well meeting was here, lot of people left phone numbers and emails and could take initiative to take phone tree and contact person who has every person Some of us are very active on phones and very tight knit.

Like the idea of siren and if anyone too far who cannot hear, other community members will notify them.

Would like more advertising.

We have CDF USFS and fire station so pretty well covered, and many Not much to burn here, mountain is gone half of pastureland is gone due to previous fires.

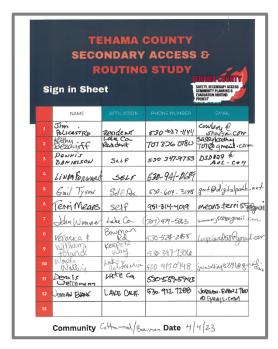




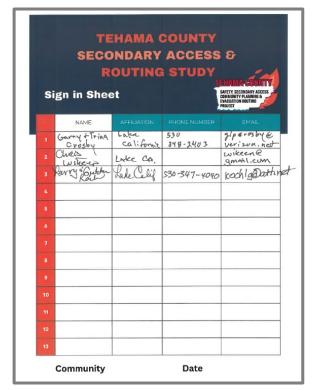




COTTONWOOD/BOWMAN – APRIL 4, 2023 Attendance



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	NAME	AFFILIATION		EMAIL
	aleen Hamahi	Reachent	530)347-7075	evensis 4eats.
	Bross Comphell		530 945-044	Pennoboll 85%
	Penny Viens	Resident	530 347- 1356	artandpenny@ya
	Art Viens	Resident	530 347-1316 SP President	" "
	Darbie Andrau	* Resident	530 9176845	darbie and re
	Gail Dorr	Resident	194 916 2986611	gaildoreca
	Pete Ferra	TI.	206, 350.5028	petermes
	CHRISTING INSU	Y RESIDENT	415-2599327	TINATINGERE
	CAROL BURCH	RESIDENT	(530)5e4-6145	carolbused 117@g











Discussion Topics, Suggestions, & Questions

Tehama County Secondary Access & Routing Study

Outreach Comments by Community

Cottonwood/Bowman

In Lake CA, our evacuation point is airplane strip that has minimal vegetation.

Part of the problem is not having a secondary access, but I think having proper communicationis a problem, Lake CA does not have that even with current resources.

Lake CA is five miles from I-5, 99% of us do not live at gate, most of us live about 12 miles from gate, take measurement from furthest point of community.

Big intersection is five miles exactly in Lake CA.

One concern I have is, I live at bottom of Lake CA and accessibility of emergency services is an issue. With I way in or out, evacuation plans we have can be revamped. There is a lack of access, what if there is a medical emergency? There are much greater concerns but adding a lane won't change anything when there is no safe escape route.

Everyone concerned about another exit.

Live out in Evergreen – dirt, windy narrow road. People trying to get in/out of houses because an accident shut down the main road.

Farquhar Road – storms came through. Evergreen Road was flooded, and we need better and more access to get out.

Big problem for vehicles to not pass and emergency vehicles trying to get in while community gets out.

How does a project deal with imminent domain? Also, Lake CA is against I-5 and a semi rolled over and was in the way of Lake CA Drive and Caltrans said it is county problem and won't put a barrier.

Has to be for greater public good, determination by county legal, provide What do we do about a County like Tehama that is poor that doesn't take care of roads and easements? Roads like Evergreen are not maintained, potholes, no vegetation reduction, need a grant to maintain roads so we can get in/out of area.

County ignores community and people do not listen to our concerns. First priority getting funding, couple years ago was funding to improve Every time we get scared of something we understand severity, we worry about emergency and getting out of there.

Back to Lake CA accident, perfect example for secondary access needs, people at county didn't respond, lines down across road, emergency vehicles couldn't get in and community couldn't get out

Suggestion: understand locals aren't understanding to want to get rid of land but if easement was made that benefited them – only during evacuations but need to get ranches on our side – benefit by getting them a road to transport their cattle easily, could help get them to easement their land.









Additionally, during the community meeting the project team received a physical copy of an email a community member of Lake California sent to the County addressing the need for a secondary access route for Lake California. *Information has been redacted for the privacy of the individual.*

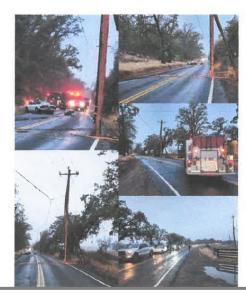
In the early evening of November 5, 2022, a car on Lake California Drive in Tehama County hit a power pole, breaking it and causing the pole, cables and guy wires to block the road. When PG&E responded, the pole and power wires actually fell onto the road turning off power to many Lake California houses.

The road was completely blocked for a number of hours and no one was allowed to enter or leave Lake California. In addition, it also prevented fire engines, emergency medical and police vehicles from entering Lake California. In the event that CalFire, medical personnel or police were needed inside Lake California for an emergency, they would not have been able to enter.

The Lake California Community has been requesting a 2ndentrance/exit for a number if years. If this is not a prefect example of WHY we need Tehama county to provide this access, I don't know what is.

As our representative, PLEASE help us get OUR county to help protect THEIR CITIZENS!

Thank you



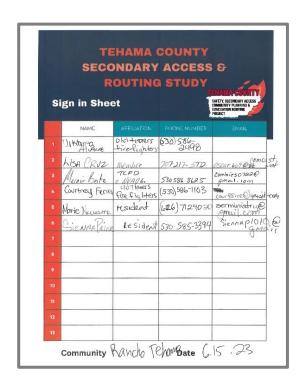






SAFETY, SECONDARY ACCESS COMMUNITY PLANNING & EVACUATION ROUTING PROJECT

RANCHO TEHAMA – JUNE 15, 2023 Attendance











POP-UP EVENTS

TEHAMA COUNTY DISTRICT FAIR - MAY 4- MAY 7, 2023

Conducting outreach at the County Fair was determined as a solution for minimizing individual community outreach events and receiving more input from all County residents.

Green DOT staff provided surveys, comment cards, and a project infographic at the event. In order to gain attraction from fair goers, GD staff conducted a raffle as an incentive for residents to complete a project survey. Raffle prizes included flashlights, walkie talkies and a first aid kit. County residents were given a brief project description and invited to take a survey to enter the raffle or leave any comments. Residents were also given project information including website and social media links.





The project booth received a moderate amount of traffic and resulted in 36 completed project surveys. Additionally, we collected four (4) resident emails to provide continuous project information. The project team received several comments about residents experiencing unusable roads due to recent flooding events and several complaints regarding the lack of reliable emergency alerts. Several residents inquired about evacuation zones and if any evacuation software will be developed.





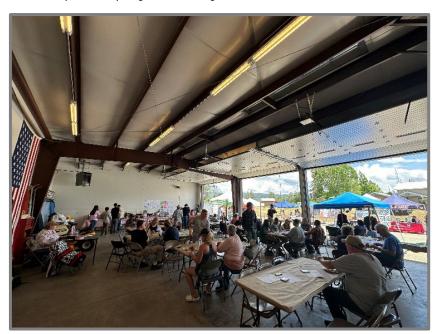




MANTON CHILI COOK-OFF - JUNE 10 2023

The project team attended the Manton Chili Cook-Off on June 10, 2023, at the Manton Volunteer Fire Department. This event was hosted by the Manton Fire Safe Council as a fundraiser and community event that aimed to increase wildfire awareness. Other wildfire-related groups tabled at the event including: CalFire, Shasta Fire Safe Council, Manton Education Council, Tehama County Sheriff, Lassen National Forest, Grind Fire Defense, and Battle Creek Watershed Conservancy.

The booth featured infographics, maps, County residents were given a brief project description, including website and media links, and were invited to take a survey to enter the raffle or leave any comments. Raffle prizes included flashlights, walkie talkies and a first aid kit. The project booth received a moderate amount of traffic and resulted in 11 completed project surveys.











ONLINE ENGAGEMENT

QUESTIONNAIRE

A simple questionnaire was created to facilitate participation and gather community input. The questions presented on the questionnaire are intended to gauge the County's concern when it comes to evacuation and preparedness. There are specific questions regarding any areas of concern in their community, evacuation preparedness and how they receive emergency alerts. The questionnaire was made available online through SurveyMonkey which was posted on the project website and presented in physical format for all completed outreach events. The project team decided on a brief, six (6) question survey in order to receive necessary feedback and avoid data gaps in unanswered questions.

1. What is you biggest evacuation concern? Please select all that apply. Flooding	TEHAMA COUNTY SECONDARY ACCESS & ROUTING STUDY COMMUNITY SURVEY TEHAMA COUNTY SAFETY, SECONDARY ACCESS EVALUATION ROUTING PROJECT TEHAMA COUNTY SAFETY, SECONDARY ACCESS EVALUATION ROUTING PROJECT TEHAMA COUNTY SAFETY, SECONDARY ACCESS EVALUATION ROUTING PROJECT TEHAMA COUNTY SAFETY, SECONDARY ACCESS EVALUATION ROUTING EVALUATION ROUTING PROJECT TEHAMA COUNTY SAFETY, SECONDARY ACCESS EVALUATION ROUTING STUDY SAFETY, SECONDARY ACCESS SECONDA
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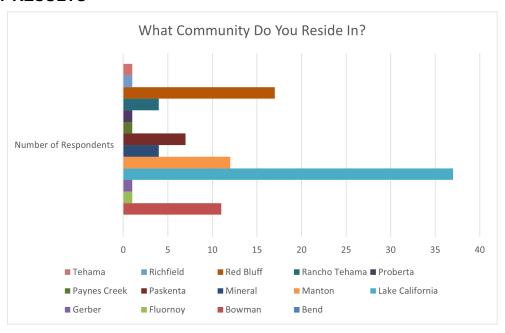




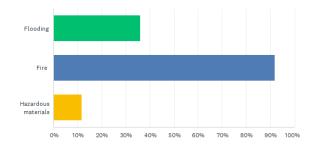




SURVEY RESULTS



Q2 What is your biggest evacuation concern? Select all that apply



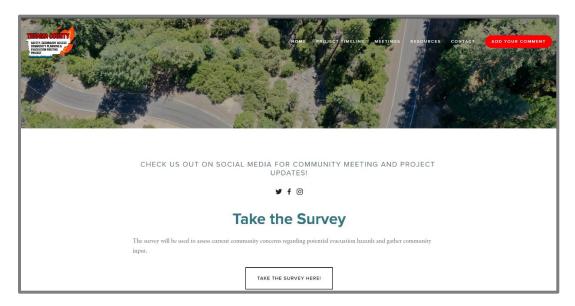








WEBSITE



A project website has been developed to display pertinent project information, project planning process, community outreach meetings, an interactive feedback map, agency and project team information, and a link to the online questionnaire. The website consisted of plan development information, a direct feedback form, questionnaire link, and meeting information. The project website can be found at www.tehamaevac.com.

ADVERTISEMENT

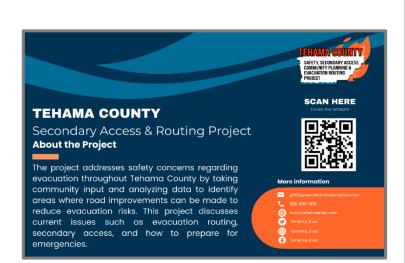
The project team distributed project information through advertisements such as social media posts and posting physical flyers throughout communities. Social media posts were posted on Facebook and Instagram on a specific project profile and shared on various County and community event pages. Advertisements consisted of upcoming community meeting events, project website link and social media handles. Physical flyers were posted in specific meeting communities at prominent locations.





















COMMUNITY INPUT SUMMARY

The project's community outreach and social media efforts have resulted in 218 total surveys. The project team received 104 physical surveys and 116 surveys from the project SurveyMonkey. A majority of the survey respondents are from Lake California. The online survey is still active, and a complete analysis of results will be conducted once the first phase of outreach events is concluded.





