2025 Strategic Fire Plan

Amador- El Dorado Unit

SIGNATURE PAGE

Unit Strategic Fire Plan developed for the Amador El Dorado Unit

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, Tribal, County and City agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre-fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended to be used as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.

DocuSigned by:
Mike Blankenheim
1958A3E570F948D...

6/9/2025

Unit Chief — Date

Mike Blankenheim

DocuSigned by:
Megan Scheeline
004027B95029408...

6/5/2025

Forester II – Resource Management — Date

Megan Scheeline

DocuSigned by:
Jeff Hoag
EF9F8B40873747E...

6/5/2025

Battalion Chief - Wildfire Resiliency Program — Date

Jeff Hoag

Signed by:
Greg Schwegler
A7C07AD7890A4FA...

6/5/2025

Fire Captain - Pre-Fire Engineer — Date

Greg Schwegler

EXECUTIVE SUMMARY

The goal of the Amador – El Dorado Unit (AEU) of CAL FIRE is to reduce the loss of life, property, watershed values, and other assets at risk from wildfire through a focused pre-fire management program and increased initial attack success.

The above statement is clear; however, the roadmap to accomplish this involves collaboration between stakeholders and communities each of which present different complexities related to project implementation and priorities regarding the threat of a wildland fire. The purpose of this Strategic Fire Plan is to provide effective direction to departmental staff and communities within the Administrative Unit to direct resources and personnel commitments towards the implementation of this Strategic Fire Plan.

The Amador - El Dorado Unit Strategic Fire Plan has been prepared with the following objectives in priority order.

1. Support project work (fuels reduction) and planning efforts that encourage the development of safe ingress and egress routes for emergency incidents as well as the protection of communities and infrastructure.

2. Continue to provide operational training that will support safe and successful suppression operations.

3. Utilize CAL FIRE and community resources to mitigate large and damaging wildfires with defensible fuel zone/fuels reduction (prescribed fire) projects at critical operational locations.

4. Continue to support the implementation of fire safe clearance standards around structures.

5. Support implementation of Wildland-Urban Interface (WUI) Building Standards by collaborating with local government planning departments and ensuring compliance with the state's minimum wildfire protection regulations for building, construction, and development in State Responsibility Areas (SRA) under California's Minimum Fire Safe Standards.

6. Conduct incident analysis to evaluate Unit success in achieving the 95% threshold of keeping fires less than 10 acres in size.

7. Continually educate the community on their role in the wildlands and support Resource Conservation Districts and Fire Safe Council activities.

8. Utilize Fire Prevention operations to reduce ignitions within the Unit.

9. Foster and build relationships with local public and private industries to develop cooperative project plans.

10. Continually reassess local mitigation projects and update this Fire Plan annually.

SECTION I: UNIT OVERVIEW

Unit Description

AEU has a unique wildland fire environment based on its Mediterranean climate, highly combustible vegetation, numerous wildland-urban interface zones, and the complexity of its terrain. Fires burn with greater intensity in this environment and are more costly and difficult to control, creating a greater risk of loss of life, property, and resources.

The Unit's Direct Protection Area (DPA[1]) on the west slope of the Central Sierra Nevada Mountain Range is experiencing moderate population growth. Most of this growth is occurring in the unincorporated areas of the Unit - the same areas that contain the most hazardous fuels and most difficult terrain. Most of the man-made values at risk from wildfire are also located in these areas.

Much of CAL FIRE's DPA contains high to very high hazard fuels (brush and timber). These areas contain steep, rugged river canyons making access and the use of heavy equipment difficult, if not impossible in some locations.

Key Issues:

- Increasing loss of life, property, and natural resources due to increasing wildfire risk.
- Inadequate community ingress/egress routes.
- Difficulty of fire suppression due to challenging terrain and hazardous conditions, leading to increased safety risks for firefighters Longer intervals between fires in certain vegetation types, leading to the accumulation of fuel and increased fire severity.
- Increasing fire intensities, escalating the potential for catastrophic wildfire events.
- Rising taxpayer costs and asset losses because of more frequent and severe fires.
  Increased population density and recreational activity in wildland-urban interface areas, contributing to a higher frequency of human-caused ignitions.

Fire History

The Unit's fire history is one of numerous small fires with large fires occurring every thirty to forty years. Fire season 2024 was moderate with only 11 fires exceeding 10 acres, the largest, Crozier Fire at 1,917 acres. Fire season 2023 experienced only 7 fires exceeding 10 acres, the largest, Liberty Fire at 71 acres. In September 2022, the Mosquito Fire burned in Placer and El Dorado Counties and was the State's largest fire that year. The Mosquito Fire burned a total of 76,788 acres and destroyed 78 structures. The last large fire completely within the Unit boundary was the Caldor Fire in 2021 (221,835 acres) which started on the El Dorado National Forest (ENF) and spread into State Responsibility Area (SRA). Over the past 20 years, population growth and development in the wildland have placed many additional homes and businesses at risk. Currently, small fires often create wildland-urban interface fire protection problems previously only found in the most densely populated areas of Southern California.

In 2008, CAL FIRE updated its fire mapping requirements to include mapping grass fires 300 or more acres, brush fires 50 or more acres, timber fires 10 or more acres, and wildland fires destroying three or more residential dwellings or commercial buildings.

Apart from the King and Butte fires, most large fires in AEU are aligned east to west. This is particularly evident in Amador County. This orientation is due to two factors, seasonal winds and terrain. Western El Dorado and Sacramento Counties are more likely to experience fires which run from the north to the south due to north wind events affecting the Sacramento Valley. The King fire was an exception as it ran south to north, influenced by wind and topography alignment. The Butte fire was influenced by a north wind during very hot and dry conditions that pushed the fire south.

[1] The area in which an agency has the financial responsibility to provide fire suppression. *CDF Direct Protection Area* (DPA) can include any combination of SRA, *Federal Responsibility Area* (FRA), or *Local Responsibility Area* (LRA), depending upon the contractual situation. For wildland fire protection DPA excludes LRA lands not intermingled in small blocks with SRA.

Fire Weather & Terrain

The Wildland Fire Triangle consists of fuels, weather, and topography. The component with the most variability is the weather, and topography being the most static. These components cannot be altered by humans to affect the potential outcome of wildland fire occurrence. The contribution to fire behavior by these components and humans requires significant analysis to meet the objective of mitigating wildland fire activity on State Responsibility Area (SRA) Lands.

Fire Weather

Fire weather for AEU is typically dominated by three general weather phenomena; the delta push influence, north wind events, and east foehn winds caused by high pressure development in the Great Basin. All three weather conditions cause potential increases in fire intensity and size. The delta influence is the most common and surfaces frequently throughout summer.

Typically, high pressure systems will dominate Northern California in the summer months, bringing extremely hot and dry conditions over much of the region. As these systems develop, they tend to originate near the Delta and Sacramento areas, bringing marine influence to the Unit. This is generally considered a good thing for fire behavior; slightly cooler afternoon temperatures and increases in relative humidity. The downside is the strong winds that typically accompany these patterns can override any benefit that may come from marine air. Typically, this type of wind will subside after sundown causing fire behavior to drop off dramatically.

The Amador-El Dorado Unit (AEU) is periodically affected by northerly and easterly wind patterns, with the strongest events typically occurring in the late fire season. These winds, known as Föhn winds in the Sierra/Cascade Region or Santa Ana winds in Southern California, are characterized by warmth and dryness due to air compression as they descend from higher elevations. This creates an ideal environment for rapid fire escalation and large-scale fire growth. While fire behavior is primarily wind-driven, as these events subside, fire behavior can shift to being influenced by fuel and topography, often pushing fires in unpredictable and challenging directions. The intensity and unpredictability of these wind events make them a critical factor in fire management, significantly amplifying the spread and severity of wildfires in AEU.

Topography

Topography in AEU is much like most other Sierra Units; flat near the valley bottom and increasingly steep as the Unit reaches higher elevations. More important is the relationship of vegetation change with that of topography. Fuel loads tend to increase significantly as the topography becomes more rugged.

The area near the Central Valley and Delta region, which is characterized by rolling hills and flat valley bottoms, is generally dominated by grass and oak-woodlands. The fire behavior is generally wind driven short duration fires, typically lasting no more than one burning period. (Typically, between 10:00 A.M. to sundown.)

As the terrain approaches the upper foothills the vegetation changes dramatically to brush and tree dominated fuel types. These areas are generally steeper and longer sloped which will tend to cause more fuel and topography dominated fire behavior. Heavier fuels over steeper slopes cause marked increases in fire intensity and fire size; this combination makes firefighting efforts increasingly more difficult. This is primarily due to the demands that heavier fuels on steeper terrain can have on resources during active suppression and mop up operations.

Higher elevation areas of the Unit are typically steeper than those of the upper foothill region. Fuels are generally Sierra Mixed Conifer, which is made up of heavy timber and significant loads of accumulated dead fuels. Fire spread is typically fuel and slope driven but winds can cause long range spotting. A major topographic feature that can lead to increased fire spread and intensity is the canyon alignment of the major river systems within the Unit. All the major river systems are generally aligned in an east/west direction which coincides with the general prevailing westerly wind patterns over the Unit. This alignment can have the effect of “channeling” which can increase the wind speed and turbulence along these river systems. This alignment can often cause fire to spread farther and with greater intensity.

Geographic/Ownership

AEU is in the Northern Central Sierra. It includes Amador, El Dorado, Alpine and portions of Sacramento and San Joaquin counties. AEU encompasses 2,668,048 acres. AEU’s DPA serves approximately 947,910 acres ***(refer to Exhibit – AEU Unit Statistics Chart – page 118)***. The United States Forest Service (USFS), Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), and Bureau of Reclamation (BOR) manage lands that are protected by AEU. Conversely, in addition to national forest lands, the USFS provides direct wildland fire protection to private lands within the Eldorado and Toiyabe National Forest. Even with the USFS providing that protection, the Unit is still actively engaged in wildland fire suppression and pre-fire projects with federal cooperators.

Within AEU, there are two all season trans-Sierra highways, US Highway 50 in El Dorado County and State Highway 88 in Amador County running east-west. Historic State Highway 49, on the west side of the Sierra and State Highway 89 in the Lake Tahoe Basin on the east side of the Sierra both run north- south. Most population growth has historically occurred along the two east-west highways (Hwy 50 and Hwy 88). The population growth can be attributed to the proximity of Sacramento, as many people living in the Unit that commute daily to the Sacramento area for work, prefer to live in the foothills.

AEU contains all or part of three major watersheds, the Middle and South Forks of the American River, the North Fork of the Mokelumne River, and the Cosumnes River basin. Numerous water agencies and power companies utilize the resources of these rivers and their tributaries for generation of hydroelectric power, and acquisition of drinking and irrigation water. In addition, these watersheds offer many outdoor recreational opportunities to residents and visitors.

Socioeconomic

The approximate resident population in AEU's DPA is 320,053. El Dorado County's highest population densities are found along the Highway 50 corridor from El Dorado Hills to Pollock Pines. The areas of Pleasant Valley and along State Highway 49 south of the community of El Dorado are also experiencing population growth. In Amador County, the population densities are greatest along the State Highway 88 corridor from the City of Jackson to the Pioneer area. A significant seasonal population increase occurs in mid-spring and continues to gradually increase due to the influx of seasonal workers seeking employment during the apple and grape harvests in the late fall.

The easy access to the Lake Tahoe Basin, recreational areas, summer homes, and tourist attractions are also major factors that influence the population during fire season. Even though most of these areas are located within the Eldorado National Forest, visitors must travel through CAL FIRE's DPA to reach them. Since most of the fires are human caused, this increase in population usually results in more wildland fire ignitions.

The Unit is home to numerous key industries that drive the local economy including timber, tourism, recreation, wine and fruit production, construction, and a range of service-oriented businesses. Each of these sectors has experienced disruptions due to wildfire in the past. Beyond direct damages, wildfires can lead to prolonged business closures, workforce displacement, and interruptions to transportation routes. For example, closures along Highway 50 during peak travel periods have historically resulted in significant economic impacts for both east and west slope communities. These examples highlight the broader economic risks wildfires pose to the region's long-term resilience and recovery.

County	***Population***
Alpine	1,204
Amador	40,474
El Dorado	191,184
Sacramento	1,585,046
San Joaquin	779,233
Unit Total	2,597,141

[2] 2020 Census Data

Divisions / Battalions / Programs

North Division

El Dorado County consists of 492,796 acres of CAL FIRE Direct Protection Area and is divided into all or portions of CAL FIRE Battalion's 1, 2, 3, 5, and 6 (See Figure B for Battalion Boundaries Map) El Dorado County consists of low-lying grass and brush lands to the west and productive timber lands on the eastern boundary. Amongst the brush and timber terrain of the Sierra Nevada Mountains, El Dorado County has a productive agricultural community; apple orchards and vineyards line the southern aspects and lush valleys. Highway 50 not only provides easy access to and from South Lake Tahoe but provides an easy Sacramento commute for those thousands of residents wanting to live in a rural community.

Battalion 1

Battalion 1 encompasses approximately 583,238 acres in El Dorado and Sacramento counties. El Dorado County communities within the Battalion include Camino, Diamond Springs, El Dorado, El Dorado Hills, Pioneer, Logtown, Latrobe, Nashville, Cameron Park, Placerville, Pleasant Valley, Pollock Pines, Rescue, Shingle Springs, and Grizzly Flats.

Like many areas in the Sierra Nevada, there exists a significant wildland-urban interface (WUI) threat within Battalion 1. There are several large, well-populated subdivisions within the Battalion that are at risk from a catastrophic fire occurrence. As a Unit, we are proactively working with residences, Sierra Pacific Industries, Pacific Gas & Electric, El Dorado Irrigation District, El Dorado Fire Safe Council, and our Federal, Tribal, and Local cooperators to reduce these risks.

Battalion 1 is an active Battalion in the Amador-El Dorado Unit regarding vegetation fire response-it has the highest urban interface population density in the Unit. Within Battalion 1 there are two CAL FIRE facilities and two unstaffed fire lookouts.

Camino Fire Station 20 and Amador El Dorado Unit Headquarters

Camino Fire Station 20 is responsible for all risk response to the areas including Camino, Pollock Pines, Placerville, Pleasant Valley, Grizzly Flats, Omo Ranch, the American River Canyon / Highway 50 corridor and is the 2nd due CAL FIRE engine into the Lake Tahoe Basin.

El Dorado Fire Station 43

The response area for El Dorado Fire Station 43 includes eastern Sacramento County, El Dorado Hills, Shingle Springs, Latrobe, Cameron Park, Placerville, El Dorado, Diamond Springs, Gold Hill, Nashville, Omo Ranch, Pleasant Valley, Pioneer, Grizzly Flats, and Rescue.

The Local Fire Agencies that lie, at least partially within Battalion 1 boundary lines are:

- El Dorado County Fire Protection District
- El Dorado Hills Fire Department
- Cameron Park Fire Department
- Diamond Springs-El Dorado Fire Protection District
- Rescue Fire Protection District
- Pioneer Fire Protection District
- Sacramento Metropolitan Fire District

The Associate Fire Safe Councils (FSC) which reside within the Battalion 1 Boundaries are:

- Aukum / Fairplay FSC
- Camino FSC
- Cedar Grove FSC
- Diamond Springs FSC
- Fort Jim FSC
- Gold Ridge Forest FSC
- Grizzly Flats FSC
- Logtown FSC
- Oak Hill FSC
- Omo Ranch FSC
- Patterson Ranch FSC
- Placerville FSC
- Royal Equestrian FSC
- Rancho Del Sol FSC
- Sand Ridge FSC
- Sierra Springs Regional FSC
- Texas Hill FSC

Battalion 2

CAL FIRE Battalion 2 lies primarily on the Georgetown Divide in northern El Dorado County. The communities of Georgetown, Garden Valley, Pilot Hill, Cool, Mosquito, Kelsey, Coloma, Lotus, Auburn Lake Trails, Rescue, and a portion of El Dorado Hills are within the Battalion. The total area of the Battalion is 357,726 acres. In November 2024, an additional 21,564 acres were added to AEU's DPA within Battalion 2 in the Volcanoville area. Fuel types within the Battalion range from 19% timber, 54% brush, to 27% grass/oak woodland.

Like most Sierra Nevada areas, Battalion 2 has a significant wildland-urban interface problem. Most construction in the area took place prior to the adoption of the Fire Safe Regulations. This has led to areas with inadequate ingress and egress routes and insufficient defensible space clearance around structures. An example of this problem was the destruction of fourteen homes in the 1994 Kelsey fire. As a Unit, we are proactively working with residents, Sierra Pacific Industries, Pacific Gas & Electric, El Dorado Fire Safe Council, and our Federal and Local cooperators to reduce these risks. Battalion 2 has multiple Vegetation Management Plans (VMP) located within its boundaries. Lyon, Georgetown-Divide and Auburn Lake Trails VMPs remain as a priority in the Battalion and unit for fuels reduction and range improvement projects, to help prevent the spread of major fire and protect the surrounding communities.

Battalion 2 consists of two CAL FIRE stations, Growlersburg Conservation Camp and one staffed Fire Lookout.

Growlersburg Conservation Camp,

Growlersburg Conservation Camp was established in 1967, Growlersburg Camp is a joint CAL FIRE and CDCR facility located near Georgetown, CA. The camp plays a vital role in wildland firefighting, emergency response, and ongoing conservation efforts across the region. Staffed by trained, incarcerated individuals, Growlersburg maintains up to five type I hand crews that support wildland fire suppression, fuels reduction, trail maintenance, and community service projects.

Garden Valley Station 50

Garden Valley Station 50 is responsible for all-risk response to the areas including Garden Valley, Georgetown, Mosquito, Greenwood, Volcanoville, Coloma, Lotus and areas of Rescue.

Pilot Hill Station 70

Pilot Hill Station 70 is responsible for all-risk response to areas including Pilot Hill, Cool, Coloma, Lotus, Rescue and areas of El Dorado Hills. Pilot Peak Fire Lookout is currently staffed during summer months with Volunteers in Preventions (VIP) members, to help with early detection of any new fires in the area.

<u>The Local Fire Agencies that lie, at least partially, within Battalion 2 boundary lines are:</u>

- Garden Valley
- Georgetown
- Mosquito
- Rescue
- El Dorado County
- El Dorado Hills

<u>The Associated Fire Safe Councils (FSC) which reside within the Battalion 2 Boundaries are:</u>

- Auburn Lake Trails FSC
- Coloma-Lotus FSC
- Cool-Pilot Hill FSC
- Gallagher Landowners FSC
- Georgetown Divide FSC
- Gold Hills Estates FSC
- Greenstone FSC
- Lakehills FSC
- Mosquito FSC
- Rescue Community FSC
- Volcanoville FSC

South Division

Amador County consists of 293,657 acres of CAL FIRE Direct Protection Area and is divided into Battalions 3 and 4. (See Figure B for Battalion Boundaries Map) Within these two Battalions are six local fire cooperators; Amador Fire Protection District, Jackson City Fire Department, Jackson Valley Fire Protection District, City of Ione Fire Department, and Lockwood Fire Protection District.

The Amador County terrain consists of low-lying grasslands to the west and productive timber lands on the eastern boundary. In the center of Amador County there is a flourishing agricultural community. These low mountain ranges are thick with brush and trees, and the valleys are lush with vineyards making Amador County a very popular area to live in as well as a great travel destination.

Battalion 3

CAL FIRE Battalion 3 covers 282,349 acres and includes portions of El Dorado and Amador counties. The communities of Pioneer, Pine Grove, Volcano, and Lockwood in Amador County, and Omo Ranch and Mt. Aukum in El Dorado County, fall within the Battalion's boundaries. The total area of the Battalion is diverse, with fuel types ranging from 45% timber, 48% brush, to 7% grassy oak woodland.
Like many areas in the Sierra foothills, Battalion 3 faces significant wildland-urban interface challenges. There are several large, densely populated subdivisions within the Battalion that are at high risk of catastrophic fire events. As a Unit, CAL FIRE is proactively working with a variety of partners, including residents, Sierra Pacific Industries, Pacific Gas & Electric, the Amador Fire Safe Council, and other federal and local cooperators, to reduce fire risk and mitigate potential wildfire damage.

Pine Grove Station 80

Pine Grove Station is located in Pine Grove and is responsible for all-risk response in the surrounding areas, including Pine Grove, Volcano, Lockwood, and parts of the El Dorado foothills. The station is staffed with two Type III engines and a Battalion Chief. It is an essential base of operations for initial attack fires and provides vital support for pre-fire treatment projects throughout Amador County.

Dew Drop Station 10

Dew Drop Station, located east of Pioneer, is responsible for all-risk response in the nearby communities of Pioneer, Pine Grove, and other surrounding areas. The station is staffed with one Type III engine, and during fire season, it also benefits from staffing provided by an engine from the **El Dorado National Forest**. This collaboration enhances the station's ability to respond quickly to fire events and provides additional support during the peak of fire season.

Pine Grove Youth Conservation Camp

Pine Grove Youth Conservation Camp, located in Pine Grove, provides up to four Type I hand crews that are instrumental in fuel reduction and vegetation management projects across Amador County. The camp is staffed with young adults aged 18-25, under contract with the California Department of Corrections and Rehabilitation (CDCR), making it the last remaining youth camp in the state. Crews provide hundreds of hours of work for local projects such as vegetation management, fuels reduction, and work for the **Amador Fire Safe Council**, **State Parks**, and **local municipalities** (including Jackson, Sutter Creek, and Ione). The crews also serve as a critical resource during wildfire events, providing hands-on support for suppression efforts.

Mount Zion Lookout

Since 2020, **Mount Zion Lookout**, located within Battalion 3, has been staffed with **Volunteers in Prevention (VIPs)** during fire season. This staffing is essential for early detection of wildfires in the region, allowing for quick responses to emerging fire threats.

The local fire agencies that lie within the Battalion 3 boundary lines are:

- Pioneer Fire Protection District
- El Dorado County Protection District
- Lockwood Fire Protection District
- Amador Fire Protection District
- El Dorado National Forest

Battalion 4

AEU Battalion 4 covers 650,425 acres and encompasses portions of Amador, El Dorado, Sacramento, and San Joaquin counties. The fuel types in the Battalion range from 15% timber to 34% brush, and 51% grass/oak woodland.

Like the other Battalions in the Unit, there exists a significant wildland-urban interface problem within the Battalion. There are several large, well-populated subdivisions that are at risk of large catastrophic fires. As a Unit, we are proactively working with residents, Sierra Pacific Industries, Amador Fire Safe Council, and our Federal and Local cooperators to reduce these risks.

Sutter Hill Station 60

Sutter Hill station staffs one Type III engine year- round and a second Type III engine and bulldozer during fire season. Sutter Hill station is also the location of an automotive shop, and the Unit's training classroom.

River Pines Station 30

Station 30 in River Pines, staffs one Type III engine during fire season. There are no CAL FIRE stations in Sacramento or San Joaquin counties.

Cooperating Fire Agencies

The CAL FIRE Academy and fifteen fire departments lie, at least partially, within the Battalion. The Local Fire Agencies that lie within Battalion 4 boundary lines are:

Amador Fire Protection District

- Ione City Fire
- Jackson City Fire
- Jackson Valley Fire Protection District
- Lockwood Fire Protection District
- Mule Creek State Prison Fire
- Plymouth City Fire
- Sutter Creek Fire Protection District
- Clements Fire District
- Liberty Rural Fire Protection District
- Herald Fire Protection District
- Wilton Fire Protection District
- Sacramento Metropolitan Fire District

- Pioneer Fire Protection District

CAL FIRE and the above fire departments serve the following communities: Buena Vista, Carbondale, Comanche, Fiddletown, Ione, Jackson, Jackson Rancheria Casino, Martell, Plymouth, River Pines, Sutter Creek, Amador City, Dry Town, Clements, Herald, Wilton, Rancho Murieta and Mt. Aukum.

The Amador Fire Safe Council (FSC) is a cooperating agency within Amador County.

East Division

Battalion 6

CAL FIRE Battalion 6 includes most of Alpine County and those portions of Lake Tahoe Basin that lie within El Dorado County. The only portion of Alpine County that does not fall within Battalion 6 is Bear Valley, California, which is administered by the Tuolumne-Calaveras Unit of CAL FIRE. The Communities of South Lake Tahoe, Meyers, Fallen Leaf Lake, Phillips, Meeks Bay, Twin Bridges, Kirkwood, Woodfords, and Markleeville are within Battalion 6. The Lake Tahoe Basin is highly complex with fire service jurisdiction split between two states, five Counties, seven local fire districts, one city fire department, two CAL FIRE Units, the Nevada Division of Forestry, and U.S. Forest Service Lake Tahoe Basin Management Unit. For this reason, the Amador-El Dorado Unit coordinates closely with the adjoining Nevada-Yuba-Placer CAL FIRE Unit for operational, administrative, prevention, and grant funding decisions within the Lake Tahoe Basin. The Amador-El Dorado Unit has direct wildland fire protection responsibility for all State Responsibility Area lands within the Lake Tahoe Basin.

Alpine County is included within the administrative boundaries of Battalion 6. Alpine county is largely made up of Federal National Forest and designated Wilderness Area lands. CAL FIRE has resumed Direct Protection Authority over State Responsibility Areas (SRA) in Alpine County, while continuing to utilize the closest resource concept through the CFMA. The total area of the Battalion is approximately 790,003 acres and is comprised of mostly high-altitude conifer stands common to the high elevation (5,000 – 10,000+ feet) Sierra Nevada Mountains. In November 2024, an additional 23,443 acres were added to AEU's DPA in Battalion 6, all near Markleeville. The primary fuel type of the State Responsibility Area is Jeffery Pine Mixed Conifer Forest, Pinyon-Juniper, and East Side Sage Brush.
Land previously protected by the United States Forest Service (USFS) formally became SRA land due to recommendations made in 2008 by the Emergency California-Nevada Tahoe Basin Fire Commission; a Commission convened by the Governors of California and Nevada following the devastating Angora Fire the previous year. In 2008, because of a Governor's Executive Order, CAL FIRE AEU began staffing one fire engine in the Basin

Lake Tahoe Fire Station 5

CAL FIRE staffs one Type III fire engine at a leased facility located within the Lake Valley Fire Protection District. Lake Tahoe Station 5 is one of two CAL FIRE facilities located in the Tahoe Basin with the other located in Carnelian Bay on the North Shore of Lake Tahoe.

Tahoe-Meyers Fire Center

In 2021, CAL FIRE was given authorization to staff two (2) CAL FIRE/CCC crews to assist with fire suppression duties and aid in fuels reduction projects based out of Meyers, CA, near South Lake Tahoe.
On May 3, 2021, CAL FIRE began the implementation of two (2) Type 1 CAL FIRE/CCC Fire Crews to bolster the number of hand crews available for fire suppression response and fuel reduction projects.
The Tahoe-Meyers Fire Center consists of 2 Battalion Chiefs, 7 Fire Captains, 6 Fire Apparatus Engineers and 2 crews, each staffed with 15 Corpsmembers. The Fire Center provides crew availability 7 days a week during peak fire season and is actively engaged with state and local cooperators in fuels reduction and vegetation management projects throughout the year.

The Lake Tahoe CAL FIRE station also works closely with Lake Tahoe Community College (LTCC), assisting with their firefighter academy, teaching classes and assisting in training drills. Additionally, the Amador El Dorado Unit Training Bureau's current training contract is hosted by LTCC.

Meyers Administrative Offices

Division and Battalion Headquarters are both located at administrative offices CAL FIRE maintains in Meyers, California. The East Division Operations Chief, Battalion Chief, SRA funded staff work from this facility.

Lake Tahoe Basin Fire Agencies:

Cooperating Fire Agencies

- Lake Valley Fire Protection District
- Fallen Leaf Lake Fire Community Service District
- Meeks Bay Fire Protection District (under agreement with North Lake Tahoe Fire Protection District)
- Tahoe-Douglas Fire Protection District
- North Lake Tahoe Fire Protection District
- North Tahoe Fire Protection District
- Nevada Division of Forestry
- U.S.F.S Lake Tahoe Basin Management Unit

Local Government Fire Departments

- South Lake Tahoe Fire Department

Alpine County Fire Agencies:

- U.S.F.S. El Dorado National Forest
- U.S.F.S. Humboldt-Toiyabe National Forest
- U.S.D.I. Bureau of Indian Affairs
- U.S.D.I. Bureau of Land Management
- Eastern Alpine County Volunteer Fire Department
- Kirkwood Fire Department

Community Wildfire Protection Plans (CWPP) in the Battalion:

- Lake Tahoe Basin CWPP
- Alpine County CWPP

West Division

The West Division oversees the administration and operation of the Cameron Park Fire Department Agreement, the Ponderosa Fire Crews, and the McClellan Airtanker Base.

Battalion 5 – Cameron Park Fire Department (Cooperative Agreement)

Located in the foothills of the Sierra Nevada, the Cameron Park Fire Department sits within the unincorporated community of Cameron Park at 4,328 total acres. It serves the community, its citizens, visitors, and neighboring areas under the direction and governing Board of the Cameron Park Community Services District. Situated along the Highway 50 corridor, the Fire Department provides a wide array of fire and emergency services to those living in the community as well as those passing through for business and leisure activities.

The Fire Department serves the community from two full-time staffed fire stations situated in the north and south ends of the district. Station 88 is located on the North side of town at the intersection of Cameron Park Drive and Alhambra. Station 89 serves the South side of town and is located on County Club Drive. Each engine is staffed with a minimum of two personnel each day and can provide paramedic services 24 hours per day.

Cameron Park Fire Department, in a cooperative agreement with CAL FIRE, strives to provide its citizens, business members and visitors with fire and emergency services that meet or exceed expectations.
From fire prevention education through participation in school programs, static displays, and community events, to fire prevention inspection and enforcement, it is our goal to make Cameron Park a fire safe community.

The Local Fire Agencies that immediately surround Battalion 5 are:

- El Dorado County Fire Protection District
- El Dorado Hills Fire Department
- Rescue Fire Protection District

The Associate Fire Safe Council (FSC) which reside within the Battalion 1 Boundaries are:

- Greater Cameron Park FSC

Ponderosa Fire Crews

In the summer of 2020, due to a reduced number of California Department of Corrections (CDCR) crews, CAL FIRE initiated a pilot program for Fire Fighter 1I hand crews. The success of these crews statewide led to CAL FIRE permanently funding them. By 2022, the Ponderosa Fire Center secured full funding for 2 Battalion Chiefs, 7 Fire Captains, 6 Fire Apparatus Engineers, and 80 firefighters, enabling the deployment of 2 Fire Fighter I hand crews daily.

In January 2024, additional funding was granted to expand staffing to 2 Battalion Chiefs, 10 Fire Captains, 9 Engineers, and 120 Firefighters, resulting in 3 Fire Fighter 1 crews daily. The establishment of the new Ponderosa Fire Center in Cameron Park offers a more suitable location to accommodate the increased number of Fire Fighters and proximity to various vegetation management programs and cooperative fuels reduction projects within the Unit. Moreover, its central location facilitates a more efficient response throughout the Unit.

CAL FIRE Firefighter I Hand Crews are highly trained firefighters who specialize in wildland fire operations and all hazard incident operations. Their primary responsibility while assigned to a wildland fire is constructing handline with chainsaws and hand tools. These crews are also used to defend structures during wildfire. While FF I Hand Crews are utilized primarily for wildland fire operations, they can also assist in efforts to contain and mitigate any of California's major disasters, including floods, earthquakes, heavy snow, and search and rescue operations. When not assigned to a wildland fire or emergency incident, these crews focus on fuels reduction and vegetation management project work in communities.

McClellan Airtanker Base

McClellan Airtanker Base (MATB) originated in 2008. Located in McClellan at the McClellan Airport, MATB, is the only airtanker base for CAL FIRE that can load every type of airtanker. The base was designed to handle multiple Very Large Air Tankers (VLAT) at one time, to be dispatched throughout the state.

McClellan Airport is a general aviation airport situated at the 76.8-foot elevation with a 10,599-foot- long runway. The airport can support any air tanker, large helicopter operations and air attack platforms.

Resources stationed at McClellan Airtanker Base:

1 – OV-10 Bronco – Primary Mission is to function as Aerial Supervision Module. It can function as an Air Attack Platform if needed for Multiple Aircraft resources assigned throughout the year.

CAL FIRE's fire protection objective is to contain 95% of all unwanted fires to 10 acres or less. Aviation assets are instrumental in meeting and maintaining this objective. Air Attack and Helitack base locations are designed to reduce the number of large fires throughout the State. The purpose and capability of air tankers and helicopters is to place fire retardant and personnel at the fire scene before ground forces, and to support those forces.

Aircraft initial response criteria have been established to deliver retardant to the fire scene (on state responsibility lands) within 20 minutes of dispatch and to provide follow- up aircraft as needed. This response criteria plan was developed to include the use of USFS and BLM aircraft on a closest forces concept. Air assets located at MATB can respond to a fire anywhere in California, Nevada, Oregon, Idaho and nationally depending on the fire activity.

Administrative Division

Battalion 9 – Camino Emergency Command Center

The Camino Interagency Emergency Command Center (CICC) provides Command and Control for all State Responsibility Area (SRA), Local Responsibility Area (LRA), and Federal Responsibility Area (FRA) incidents. Those areas include Amador, El Dorado, Alpine, and Sacramento Counties as well as the Eldorado National Forest (ENF), and Tahoe Management Unit (TMU).

Amador - El Dorado Unit (AEU), Eldorado National Forest (ENF) and Tahoe Management Unit (TMU) are located in CICC's Emergency Command Center at the CAL FIRE Camino Headquarters. The Interagency Command Center allows each agency to share resources and assures coordination of local, state, and federal emergency response forces.

CICC monitors fire weather conditions within the Unit. This helps the decision-making process to ensure proper staffing prior to weather events that could affect fire behavior. CICC maintains 4 Remote Weather Stations (RAWS) and monitors these daily using this information to set the appropriate dispatch level. A Standard Response Plan is pre-determined for each dispatch level for timely activation of resources in the event of a vegetation fire, or any type of incident which is threatening the wildland.

CICC utilizes the Interagency Resource Ordering Capability (IROC) and Hired Equipment Management System (HEMS) to move resources which allows personnel to support any incident locally, statewide, or nationally. IROC and HEMS contain information, such as, the Incident Command System (ICS) qualifications for AEU, ENF, TMU, and cooperator personnel / equipment. Other supplies, vendors, private resources, and call when needed support or tactical equipment (i.e., dozers, helicopters, water tenders, etc.), information. CICC is also capable of handling incidents that may require Extended
Attack operations into multiple days. The CICC Expanded ECC is used for large or complex incidents that outgrow Initial Attack (IA), so the IA floor of the ECC can continue mitigating new Initial Attack
incidents. When an IA incident occurs that has the potential to become an extended attack or major incident, CICC immediately staffs Expanded with additional ECC personnel. Once the CICC Expanded is open and functional, all ordering for the given incident takes place within expanded and staffing levels are adjusted based on the size and / or complexity of the incident.

CICC Mission Statement

The Camino Interagency Command Center, operated by California Department of Forestry and Fire Protection and the United States Forest Service, is a cooperative interagency command center. The command center provides professional and efficient command and control services for the residents and visitors of El Dorado, Amador, Sacramento, and Alpine Counties including the Eldorado National Forest and the Tahoe Management Unit. The primary mission is to achieve the most economical and effective cooperative fire, aviation management, emergency medical response, law enforcement, and rescue service for the communities we serve.

AEU Wildfire Resiliency Program

The CAL FIRE AEU Wildfire Resiliency Program is a comprehensive program designed to mitigate wildfire risks and increase resiliency within the Amador-El Dorado Units jurisdiction. The program is led by one Battalion Chief who oversees several key components, including the defensible space inspection program, the Unit PIO, the Unit Research Data Specialist, and the Unit Pre-Fire Engineer (PFE) Captain. The program Battalion Chief serves as a liaison to various wildfire resiliency groups, such as Fire Safe Councils, Firewise Communities, Fire Adapted Communities, Resource Conservation Districts, as well as county and local fire departments to facilitate community outreach, education, engineering and enforcement. The Battalion Chief also oversees enforcement of state wildfire regulations relating to development and wildfire prevention.

The defensible space inspection program is responsible for ensuring that homes and properties within the AEU jurisdiction meet the state-mandated defensible space requirements. The program is staffed with six defensible space inspectors (DSI) who perform LE 100 inspections to PRC 4291 standards. The DSI's also perform inspections related to California Civil Code 1102.09 for real estate transactions within designated fire severity zones.

The Utility Wildfire Mitigation Program was created in 2018 by Senate Bills 1028 and 901 as a response to loss of property and lives from utility-caused fires and climate change. By mitigating tree failure and contact with electric infrastructure, the consequence of direct and indirect loss is less likely to occur. The Unit's objective is to have Defensible Space Inspectors conduct Utility inspections as they are observed.

The unit PFE Captain is responsible for the unit's fire plan, fire maps, and other GIS-related functions. The PFE also oversees the daily functions of the Unit's Defensible Space Program and ensure that defensible space inspections are conducted consistently and effectively.

The Wildfire Resiliency Program also enforces state regulations related to wildfire safety. This includes the California State Minimum Fire Safe Regulations (PRC 4290), State minimum defensible space requirements (PRC4291), as well as other relevant wildfire legislation in California. The program works closely with county planning and building offices along with local fire jurisdictions for buildings, construction, and development in the State Responsibility Area (SRA) and the Very High Fire Hazard Severity Zones (VHFHSZ).

Training Bureau

The primary responsibility of the AEU Training Bureau is to provide training and assist with records maintenance for all employees assigned to the CAL FIRE Amador El Dorado Unit. Additional responsibilities include the coordination of State, Region and outside training in support of the Department's mission. The Training Bureau assists with scheduling and facilitating the required training and testing of the Unit's CFFJAC employees. This is accomplished by the development of an annual training plan that serves the needs of the Department and all personnel within the Unit. The Unit's training plan is used to develop and support comprehensive training for all employees, ensure compliance with state and policy mandated training, enhance employee's incident qualifications, and develop career tracks that benefit the Department's mission as a leader in all risk emergency response and incident command.

The Department training program operates within a traditional chain of command process, from the Department to the Region, then to the Unit.

All Training is prioritized and allocated utilizing the following criteria:

- Mandatory / Position Required Training (required by policy, law, or statute)
- Incident Command System Training (based on the ERD needs in support of Department's Mission)
- Career Enhancement and Employee Development

Alpine County

Alpine County consists of 474,266 acres, with 23,006 acres of CAL FIRE DPA. However, 34,374 of those acres are private lands making them SRA (approximately 7%). Alpine County is part of CAL FIRE Battalion 6 (See Figure B for Battalion Boundaries Map) and consists of mostly National Forest and Wilderness lands. Fire protection is mostly provided by Federal cooperators (USFS, BLM).

Sacramento County

Sacramento County consists of 113,574 acres of CAL FIRE Direct Protection Area and is divided into portions of CAL FIRE Battalion 1 and Battalion 4 (See Figure B for Battalion Boundaries Map). Much of Sacramento County is provided fire protection by local government cooperators; Sacramento Metropolitan Fire, Folsom Fire Department, Cosumnes Fire Protection District, Herald Fire Protection District, and Wilton Fire Protection District.

San Joaquin County

San Joaquin County consists of 24,877 acres of CAL FIRE Direct Protection Areas with the Amador-El Dorado Unit and is part of CAL FIRE Battalion 4 (See Figure B for Battalion Boundaries Map). San Joaquin County terrain consists of mostly grazing grassland and agriculture. Fire protection is provided by CAL FIRE AEU, TCU and local government cooperators.

****SEE EXHIBIT: Amador – El Dorado Unit Statistics Charts (page 117)**

SECTION II: COLLABORATIVE STRATEGY FOR WILDFIRE RISK AND RESILIENCE

AEU Collaboration Strategy

The Amador-El Dorado Unit's Fire Plan serves as an internal framework for identifying local wildfire hazards and implementing mitigation strategies that support CAL FIRE's mission of wildfire prevention and suppression. While the Plan is developed by the Unit, it reflects an understanding that coordination with state, federal, and local agencies—as well as Fire Safe Councils, Resource Conservation Districts, local governments, and private cooperators—is critical to achieving shared objectives.

The Plan includes Battalion-level descriptions of CAL FIRE facilities and resources and outlines a comprehensive approach to reducing the frequency and impacts of wildfires on communities, infrastructure, and natural landscapes.

Fuel reduction projects are a core strategy within the Fire Plan. These efforts prioritize areas that enhance firefighter access and operational space, support safe evacuation routes, and reduce wildfire risk to developed areas. Project planning is focused on actions with the greatest potential to protect life, property, and natural resources.

CAL FIRE is largely not a landowner within the State Responsibility Area (SRA); however, the Department has a statutory obligation to prevent and suppress wildfires. As such, effective fuels reduction depends heavily on partner support. The Unit works closely with Fire Safe Councils, Resource Conservation Districts, federal partners, and local governments to identify and implement projects. Fire Safe Councils and groups like OWPR, in particular, provide a platform for building local support and securing resources for fuels treatment and public education—often enabling the completion of projects that would not otherwise be possible.

By aligning efforts and maintaining open communication with collaborators, the Unit maximizes progress toward reducing wildfire risk and strengthening regional resilience. CAL FIRE's leadership in fire planning, paired with active community engagement, is central to achieving long-term success across the landscape.

Community Wildfire Protection Plans (CWPP's)

CAL FIRE AEU plays a pivotal role in coordinating wildfire prevention efforts through close collaboration with local Fire Safe Councils, governments, and wildfire groups. These partnerships are especially critical when developing and updating Community Wildfire Protection Plans (CWPPs), which serve as strategic blueprints for reducing wildfire risk and increasing community resilience. In areas like the Tahoe Basin, El Dorado County, and Alpine County, CAL FIRE AEU works alongside local Fire Safe Councils and county officials to ensure that the goals outlined in these plans align with both local needs and regional priorities. By combining CAL FIRE's technical expertise with the local knowledge of these organizations, the Unit ensures that projects are tailored to the unique wildfire risks each area faces, including considerations for terrain, fuel types, and community structures.

In the past year and ongoing, CAL FIRE AEU has been working on updates to the Amador-El Dorado West CWPP and the Tahoe Basin CWPP. These updates reflect the evolving fire risks and include revisions to project goals, risk assessments, and mitigation strategies. Through regular coordination and planning meetings, CAL FIRE AEU and its partners identify overlapping project opportunities and share resources, helping to avoid duplication of efforts while maximizing the impact of wildfire mitigation projects. This collaborative approach also enables the Unit to leverage state, federal, and local funding for joint projects, such as fuel reduction, defensible space creation, and public education campaigns. CAL FIRE AEU collaborates with local governments and Fire Safe Councils to prioritize projects that not only reduce fire risk but also protect the ecological health of the region. Similarly, in El Dorado and Alpine Counties, the partnership ensures that each CWPP is an integrated effort, aligning with broader regional strategies to address wildfire hazards effectively and sustainably

Community, Agency, and Fire Safe Council Collaboration

The Amador-El Dorado Unit's approach to wildfire risk reduction is rooted in strong cooperation with a wide array of community stakeholders, agencies, Fire Safe Councils, and tribal groups. These partnerships play a vital role in enhancing fire resilience across the region by aligning efforts, resources, and expertise. Through collaborative initiatives, CAL FIRE works closely with local, state, and federal entities, as well as community organizations, to implement fire prevention strategies, conduct fuel reduction projects, and support public education. This coordination ensures that wildfire mitigation efforts are both comprehensive and sustainable, engaging key partners who help drive the success of the Unit’s objectives. A detailed list of these collaborators, including their organization and role, is provided in the following table

AEU Unit Fire Plan Cooperators		
Organization	**Title**	**Contact Number**
Sierra Pacific Industries	Forester	(209) 223-7170
Pacific Gas and Electric	Vegetation Program Manager	(800) 743-5000
Amador Fire Safe Council	Executive Director	(209) 304-2187
Amador County OES	Sheriff	(209) 223-6384
El Dorado County Office of Wildfire Preparedness and Resilience	Principal Management Analyst	(530) 621-5569
El Dorado County Fire Safe and Satellite Council’s	Chairperson/Co-Chairperson	(530) 647-1700
Tahoe Fire Adapted Communities	Program Manager	(530) 543-1501
El Dorado County OES	Sheriff	(530) 621-5895
El Dorado and Georgetown Divide Resource Conservation District	District Manager	(530) 303-5328
Alpine Fire Council	President	(619) 244-6093
United States Forest Service	Lake Tahoe Basin	(530) 543-2600
United States Forest Service	El Dorado National Forest	(530) 622-5061

AEU Unit Fire Plan Cooperators		
Organization	**Title**	**Contact Number**
United States Forest Service	Humboldt/Toiyabe Forest	(775) 331-6444
U.S.D.I. Bureau of Indian Affairs	Pacific Regional Director	(916) 978-6000
Bureau of Reclamation	Area Manager	(916) 989-7179
California State Parks	Marshal Gold Discovery SHP	(530) 622-3470
Bureau of Land Management	Motherlode Field Office	(916) 941-3101

SECTION III: VALUES AT RISK AND HAZARD

Values at Risk and Hazard highlights the critical assets and areas that are most vulnerable to wildfire within the Amador-El Dorado Unit. These values include the Wildland-Urban Interface (WUI), ecological resources, watersheds, and critical access routes, all of which are integral to community safety, environmental health, and emergency response capabilities. The associated hazards, such as drought, tree mortality, and risks identified in the Fire Hazard Severity Zones (FHSZ), are key factors that influence our risk assessment and project prioritization. Understanding these values and hazards allows CAL FIRE to strategically allocate resources and focus mitigation efforts where they will have the greatest impact on reducing wildfire risks.

Values

Values encompass significant societal, ecological, and cultural features susceptible to wildfire damage or destruction. Below is a detailed description of these values and their respective risk assessments:

Value	Public Issue Category	Location and Ranking Methodology
Beaver Highly Suitable Habitat	Environment, Wildlife	Highly suitable habitats for beavers, ranked based on ecological significance and fire susceptibility
CAL FIRE Subdivision Review	Public Safety, Infrastructure	Subdivisions under CAL FIRE review, ranked by fire risk and critical infrastructure proximity
CAL FIRE WUII	Public Safety, Infrastructure	Areas under CAL FIRE's Wildland-Urban Interface Initiative, ranked by wildfire risk mitigation measures
California Black Oak	Environment, Wildlife	Habitat for California Black Oak, ranked based on ecological impact and fire susceptibility
California Black Oak Acorn Harvest	Environment, Wildlife	Areas where California Black Oak acorn harvesting occurs, ranked by ecological value and fire risk
Communication Infrastructure	Public Safety, Infrastructure	Critical communication infrastructure, ranked based on emergency response support and fire risk
Critical Access Roads	Public Safety, Infrastructure	Roads critical for emergency access, ranked by accessibility and fire risk mitigation
Critical Structures	Public Safety, Infrastructure	Structures vital for emergency services, ranked by importance and vulnerability to fire
Dams	Public Safety, Infrastructure	Dams critical for water supply and flood control, ranked based on impact and fire risk mitigation
Emergency Service Facilities	Public Safety, Infrastructure	Facilities providing emergency services, ranked by service delivery capacity and fire resilience

Value	Public Issue Category	Location and Ranking Methodology
Energy Facilities	Public Safety, Infrastructure	Facilities related to energy production, ranked based on fire safety measures and operational impact
Freshwater Wetlands	Environment, Public Welfare	Wetlands important for freshwater ecosystems, ranked by ecological value and fire susceptibility
High Erosion Potential	Environment	Areas prone to high erosion, ranked based on erosion rates and susceptibility to wildfire impacts
Historic Features	Public Welfare, Cultural	Historic sites and features, ranked by cultural significance and vulnerability to fire
Lakes	Environment, Public Welfare	Lakes and their ecological importance, ranked based on ecological impact and fire risk mitigation
Managed Timberlands	Environment, Public Welfare	Timberlands under management, ranked by sustainable practices and fire risk mitigation
Monitoring Stations	Public Safety, Infrastructure	Stations for environmental monitoring, ranked by data collection importance and fire resilience
Perennial Rivers and Streams	Environment	Perennial water bodies and their ecological role, ranked based on ecological significance and fire risk
Recreation Areas	Public Welfare, Recreation	Recreational sites and facilities, ranked by public use and fire susceptibility
Riparian Areas	Environment, Public Welfare	Riparian zones critical for ecosystem health, ranked by ecological value and fire risk mitigation
Structure Transmission Zone	Public Safety, Infrastructure	Zones impacting structure transmission, ranked by fire protection measures and structural impact
Structures	Public Safety, Infrastructure	Residential and commercial structures, ranked by density and vulnerability to fire
Trails	Public Welfare, Recreation	Trails and their recreational value, ranked based on accessibility and fire risk mitigation
Transmission Lines	Public Safety, Infrastructure	Power and utility transmission lines, ranked by infrastructure integrity and fire risk mitigation
Water Facilities	Public Welfare, Infrastructure	Facilities critical for water supply, ranked based on service reliability and fire protection
Air Quality	Public Health, Environment, Public Welfare	Impacts on health, materials, vegetation, and visibility, ranked by vegetation type and air basin
Rangelands	Public Welfare, Environment	Rangelands ranked by ecological value and potential impact on livestock and wildlife
Whitebark Pine	Environment, Wildlife	Habitat for Whitebark Pine, ranked by ecological role and vulnerability to fire

Understanding the type, scale, and location of these values at risk is essential for effective fire protection planning. Given resource limitations, allocating firefighting resources should prioritize areas with higher value at risk. Additionally, this knowledge informs project selection, maximizing the benefits of investments in wildfire prevention and mitigation efforts.

Communities At Risk

Protecting communities from wildfire is a primary focus of our unit's wildfire management strategy. We prioritize proactive measures to mitigate risks and enhance community resilience. In collaboration with local fire agencies and guided by the Communities at Risk list, we identify and prioritize communities vulnerable to wildfire impacts. This list, in addition to other tools and methods, helps guide us to areas where urban development meets wildland fuels, highlighting those most in need of mitigation efforts.

Our strategy emphasizes community resilience through initiatives such as defensible space programs, public education campaigns, and emergency preparedness training. These efforts aim to reduce the vulnerability of homes and infrastructure to wildfire threats. Collaborating closely with CAL FIRE, local jurisdictions, and community stakeholders, we implement effective wildfire prevention and response strategies. This collaborative approach ensures a coordinated effort in prioritizing resources and enhancing community safety.

By leveraging the Communities at Risk list, we tailor our wildfire management efforts to address specific vulnerabilities and mitigate potential impacts on critical infrastructure, natural resources, and cultural assets within our jurisdiction. AEU is dedicated to protecting communities at risk from wildfire, building resilience, and preserving valued resources against the growing threat of wildfires.

CAL FIRE undertook the task of generating the state's list of communities at risk. With California's extensive Wildland-Urban Interface situation, the list of communities extends beyond just those on Federal lands.

Three main factors were used to determine wildland fire threat to Wildland-Urban Interface areas of California.

- **Ranking Fuel Hazards** = ranking vegetation types by their potential fire behavior during a wildfire.
- **Assessing the Probability of Fire** = the annual likelihood that a large damaging wildfire would occur in a vegetation type.
- **Defining Areas of Suitable Housing Density that Would Create Wildland-Urban Interface Fire Protection Strategy Situations** = areas of intermingled wildland fuels and urban environments that are near fire threats. The **Communities at Risk List** includes a total of 1,329 communities. Of those, many are adjacent to federal lands (USDA Forest Service, Bureau of Land Management, Department of Defense, etc.) and are indicated as such in the Federal Threat column

Communities at Risk List	COUNTY NAME	FEDERAL THREAT
Bear Valley	ALPINE	F
Kirkwood	ALPINE	F
Markleeville	ALPINE	F
Paynesville	ALPINE	F
Woodfords	ALPINE	F

Communities at Risk List	COUNTY NAME	FEDERAL THREAT
Woodfords Community (Indian Reservation)	ALPINE	F
Amador City	AMADOR	F
Fiddletown	AMADOR	F
Ione	AMADOR	
Jackson	AMADOR	F
Pine Grove	AMADOR	F
Pioneer	AMADOR	F
Plymouth	AMADOR	F
River Pines	AMADOR	
Sutter Creek	AMADOR	F
Volcano	AMADOR	F
Cameron Park	EL DORADO	F
Coloma	EL DORADO	F
Cool	EL DORADO	F
Diamond Springs	EL DORADO	F
El Dorado Hills	EL DORADO	F
Georgetown	EL DORADO	F
Glenridge	EL DORADO	F
Grizzly Flats	EL DORADO	F
Kelsey	EL DORADO	F
Latrobe	EL DORADO	F
Logtown	EL DORADO	F
Meeks Bay/Tahoe Hills	EL DORADO	F
Omo Ranch	EL DORADO	F
Outingdale	EL DORADO	F
Pilot Hill Estates	EL DORADO	F
Placerville	EL DORADO	F
Pleasant Valley	EL DORADO	F
Pollock Pines	EL DORADO	F
Rubicon	EL DORADO	F
Shingle Springs	EL DORADO	F
South Lake Tahoe	EL DORADO	F
Tahoma	EL DORADO	F
Folsom	SACRAMENTO	F
Galt	SACRAMENTO	
Rancho Murieta	SACRAMENTO	
Sacramento	SACRAMENTO	

Tree Mortality

California has been facing the worst epidemic of tree mortality in modern history. Five years of drought promoted an increased population of native bark beetles, which have contributed to the death of millions of trees on federal, state, and private lands across California. In 2023, an estimated 28.8 million dead trees were counted across California. According to the 2023 USFS Aerial Detection Survey, the estimated number of dead trees by forested counties within AEU was 2.2 million in El Dorado County, 930,000 in Alpine County, and 520,000 in Amador County. Unlike the previous wave of tree mortality across the state (2015-2016) that mostly impacted pine species, tree mortality in 2022 consisted of 77% true fir species (white fir and red fir), more true fir mortality than has ever been recorded.

Bark beetles are native to California and play an important role in forest health. At normal population levels, they attack and kill weakened trees or small pockets of trees which creates natural openings and contributes to desirable structure variability in the forest. When the majority of the forests are under stress due to factors such as drought and longer growing seasons with higher temperatures, bark beetles can reach epidemic levels and cause widespread tree mortality. Following the record rain and snowfall of the 2022-2023 winter, tree mortality moderated over the summer of 2023; however, the quantity of standing and fallen dead trees from previous mortality waves remains high in forested areas and contributes to fuel loading and fire hazard in the forest.

Fire Hazard Severity Zone Maps (FHSZ) in the Amador-El Dorado Unit (AEU)

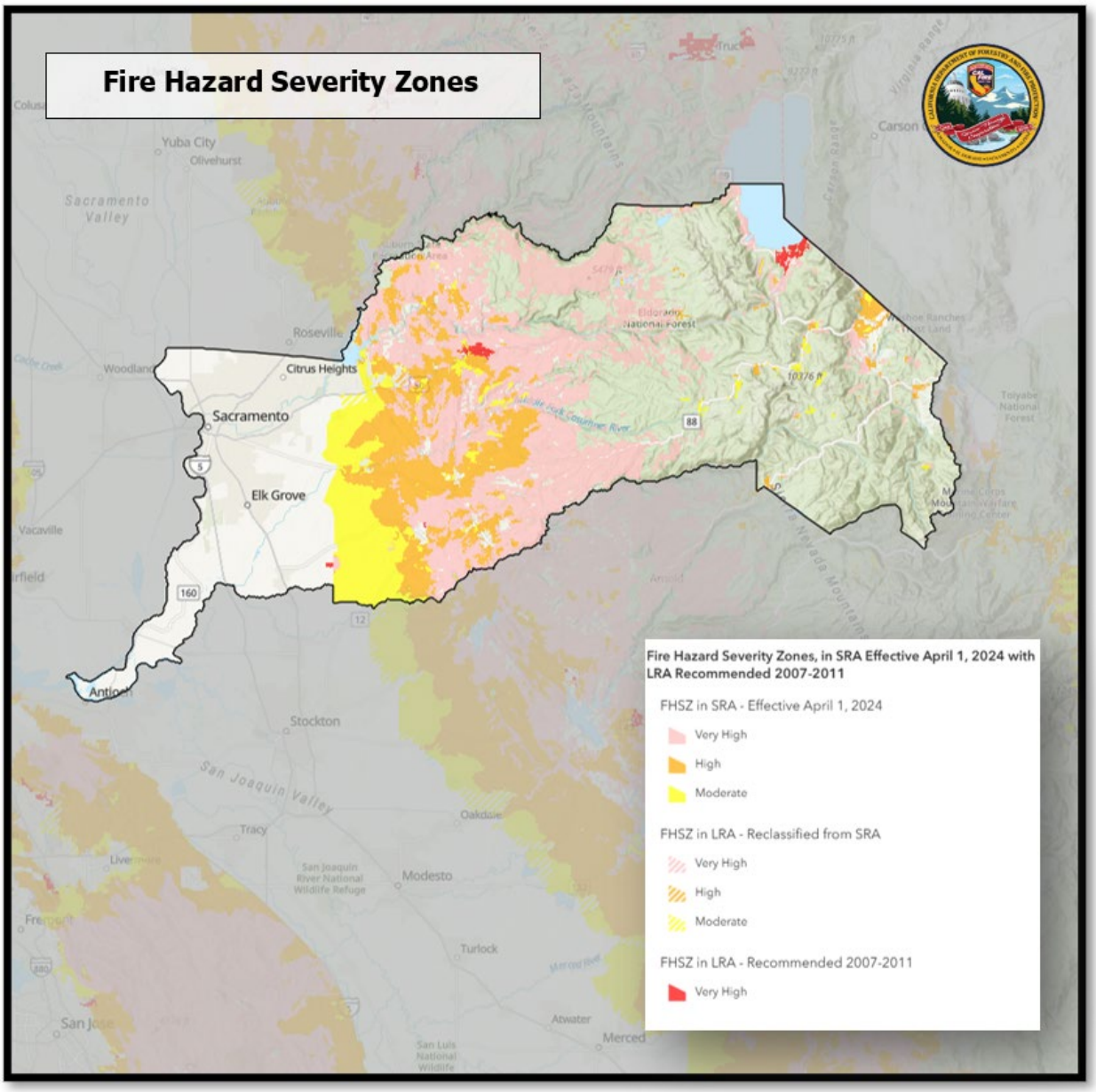
Fire Hazard Severity Zone (FHSZ) maps are a critical tool for understanding wildfire hazard in the Amador-El Dorado Unit (AEU). These maps, required by Public Resources Code Section 4201, provide an assessment of the relative fire hazard across the state, helping guide fire prevention and mitigation strategies.

FHSZ maps are designed to evaluate the **hazard** rather than the **risk** of an area. The distinction is important, as the maps focus on the potential for fire to occur based on factors such as fuel types, terrain, weather patterns, and fire history, rather than the modifications made by landowners or communities (e.g., defensible space, building construction, or water supply). The primary purpose of FHSZ maps is to identify areas where the likelihood of fire spread, and the potential severity of fires are high.
Key factors considered in the creation of FHSZ maps include:

- **Fuel Types**: The type and density of vegetation that can sustain a fire, such as grass, brush, or forested areas.
- **Terrain and Slope**: Steep and rugged terrain increases fire spread, particularly in areas with difficult access.
- **Weather Patterns**: The impact of seasonal winds (like northerly or easterly winds) and local climate conditions, which can drive the intensity and spread of wildfires.
- **Fire History**: Past fire events help predict future fire behavior in certain areas.

- **Ember Cast**: The potential for embers to be carried by wind, igniting structures and other fuels in the vicinity.
- **Proximity to Structures**: The risk of structures igniting based on their proximity to wildland fuels.

These factors combine to create an overall "fire hazard" score, which is used to designate areas into different hazard zones. The FHSZ maps categorize areas into **High**, **Very High**, or **Moderate** fire hazard zones, which assist in identifying where fire mitigation efforts should be concentrated.



The maps are updated every seven years or as necessary to reflect changes in fuel conditions, landscape features, or other factors that may affect fire hazard severity. The most recent update was completed in mid-2023, with new maps adopted on April 1, 2024. These updated maps offer a more accurate depiction of fire hazard levels in AEU, taking into account changes in fuel loads, vegetation conditions, and other key factors since the previous update in 2007.

	Acres (% of county FHSZ acres)						
FHSZ (County)	Moderate	%	High	%	Very High	%	Total
Alpine	5,679	16.54%	14,497	42.22%	14,164	41.25%	34,340
Amador	16,142	5.61%	103,463	35.95%	168,220	58.45%	287,825
El Dorado	19,582	3.57%	109,327	19.93%	419,622	76.50%	548,531
Sacramento	86,421	76.13%	25,757	22.69%	1,347	1.19%	113,525
San Joaquin	24851	99.89%	27	0.11%	0	0.00%	24,878
Total	**152,675**		**253,071**		**603,353**		**1,009,099**
							*April 2025

Local governments and agencies use FHSZ maps to inform land use planning, building codes, and fire prevention efforts. In AEU, these maps guide the development of fire prevention strategies and help direct resources toward areas with the highest fire hazard.

As we move forward with mitigation efforts, these hazard zones serve as a foundation for addressing the risks they represent. Future sections of this plan will outline strategies for reducing fire hazard in AEU, including vegetation management, fuel reduction, and community resilience efforts.

SECTION IV: MANAGEMENT STRATEGIES

Amador-El Dorado Unit Wildfire Resilience Strategy

The Amador-El Dorado Unit (AEU) employs a comprehensive and integrated strategy to address the growing wildfire threat across the region. This strategy is built on three key pillars: parcel-level, landscape-level, and community-level efforts. Each of these elements plays a critical role in reducing wildfire risks, protecting communities, and supporting fire operations. While any one of these efforts can provide some benefit, it is the integration of all three components that creates a robust defense against wildfires and enhances our ability to quickly and effectively suppress fires when they occur. By addressing wildfire risk at multiple levels, CAL FIRE AEU ensures a holistic approach that maximizes the impact of mitigation efforts, strengthens resilience, and supports fire operations on the ground.

Parcel Level: Defensible Space Inspections, Home Hardening, and Enforcement

Defensible Space Inspections

At the parcel level, CAL FIRE AEU engages directly with homeowners to address wildfire risks on individual properties. This starts with defensible space inspections, which are designed to evaluate the area around a home for flammable vegetation, the presence of combustible materials, and overall fire-resilience. During these inspections, homeowners are provided with a tailored report that outlines the necessary steps to create defensible space around their property.

Home Hardening

In addition to defensible space inspections, home hardening is a critical component of the parcel-level strategy. This involves educating homeowners on ways to enhance the fire resistance of their homes by using fire-resistant materials, retrofitting vents, installing ember-resistant screens, and ensuring proper roof and deck maintenance. CAL FIRE works with homeowners to ensure they understand the necessary steps to safeguard their homes against wildfire.

Enforcement

While education plays a primary role in ensuring defensible space compliance, enforcement is a critical component of the parcel-level strategy. It ensures that homeowners meet the standards set by state regulations and local ordinances. CAL FIRE defensible space inspectors conduct follow-up inspections and enforce compliance with these regulations, including issuing citations when necessary. By holding homeowners accountable, CAL FIRE ensures that fire-prevention measures are consistently maintained, ultimately creating a more resilient and fire-safe community. Without enforcement, defensible space efforts would be undermined, and fire risks would remain high in non-compliant areas

Landscape Level: Fuel Reduction Projects and Large-Scale Mitigation

Fuel Reduction Projects

At the landscape level, CAL FIRE focuses on fuel reduction projects—large and small—to reduce the amount of vegetation that can fuel a wildfire. These projects are designed to target areas with the greatest wildfire risk while ensuring that fire crews have effective positions to combat fires. Fuel reduction efforts may include thinning forests, clearing brush, and creating fuel breaks to interrupt fire paths. These efforts are strategically located to not only protect communities and critical infrastructure but also to enhance evacuation corridors and critical access routes. By creating defensible space along evacuation routes and ensuring that fire crews have unimpeded access to key areas, CAL FIRE enhances the safety of both residents and firefighters during wildfire events. These coordinated efforts improve fire suppression capabilities, reduce fire intensity, and provide safe passage for evacuations, ensuring a more effective response when wildfires occur.

Prescribed Fire

Prescribed fire is a key tool in landscape-level mitigation efforts, designed to reduce excessive fuel loads in a controlled and safe manner, preventing future wildfires from becoming catastrophic. Carefully planned and executed, prescribed burns help reduce fire intensity, create defensible zones, and promote firefighter safety. These burns also play a vital role in maintaining ecological health by restoring fire-adapted ecosystems, improving soil health, and supporting fire-resistant vegetation and wildlife habitats. Prescribed fire can be applied to both large and small areas, allowing for effective treatment across diverse landscapes. Additionally, prescribed burns provide valuable operational training opportunities for fire personnel, helping them gain hands-on experience in managing fire behavior and enhancing their readiness for larger wildfires.

Fuel Breaks and Fire Control Lines

In addition to fuel reduction, CAL FIRE creates strategic fuel breaks and fire control lines that provide firefighting crews with safe areas from which to fight fires. These breaks, often enhanced by controlled burns or mechanical thinning, give firefighters places to safely operate and prevent the fire from spreading to high-risk areas. These breaks are designed with the goal of protecting critical infrastructure, such as evacuation routes, water sources, and power lines, and are a crucial tool during large-scale fire events.

Project Coordination and Evaluation

CAL FIRE AEU also partners with other agencies and organizations to ensure that landscape-level projects are aligned with broader wildfire risk reduction strategies. This includes project coordination groups with other fire agencies, Fire Safe Councils, and local governments. Additionally, CAL FIRE uses tools to evaluate the effectiveness of these projects and adjust strategies as necessary. Ground truthing and post-project analysis ensure that fuel reduction efforts meet the intended goals and improve future mitigation activities.

Community Level: Prevention, Engagement, and Enforcement

Education and Outreach

A key component of CAL FIRE AEU’s community engagement is education and outreach. Through programs designed for residents, businesses, and schools, CAL FIRE educates the public about fire-safe landscaping, home hardening, and emergency preparedness. These programs aim to instill a culture of preparedness and fire safety within communities. Educational efforts are tailored to meet the needs of different groups and are delivered through direct outreach, workshops, and public events. By raising awareness and providing residents with the knowledge and tools they need to protect their homes, CAL FIRE fosters a more fire-resilient community.

Collaboration and Coordination with Other Agencies

Collaboration and coordination with other agencies are central to the success of AEU's community-level strategy. CAL FIRE works closely with local Fire Safe Councils, RCDs, local fire agencies, local government agencies, and other stakeholders to align efforts, share resources, and strengthen wildfire mitigation strategies. These partnerships ensure that projects, such as fuel reduction and public education campaigns, complement each other and are implemented effectively. CAL FIRE also works with local planning agencies to integrate fire-safe regulations into building codes and community planning, ensuring that new developments are constructed with fire resilience in mind.

Enforcement

At the community level, enforcement is strengthened through CAL FIRE's law enforcement officers, who investigate fire causes and enforce California's Forestry and Fire Laws, Penal Codes, Health and Safety Codes, and Public Resources Codes. This includes investigating suspicious fire activity and holding individuals accountable for violations. Additionally, CAL FIRE forest practice inspectors enforce California Forest Practice Rules, ensuring that forest resources and watershed values are responsibly managed, and that timber harvesting is done in a fire-safe manner.

Enforcement is critical to preventing human-caused fires, which account for the majority of wildfire ignitions in California. By ensuring strict compliance with fire laws, CAL FIRE reduces the overall risk of wildfires and helps ensure safer communities.

Bringing It All Together: A Holistic Approach to Wildfire Resilience

Each element of CAL FIRE AEU's strategy—parcel-level, landscape-level, and community-level efforts—plays an important role in reducing wildfire risk. Taken in isolation, any one of these components can contribute to wildfire resilience, but it is the integration of all three that maximizes their effectiveness. By combining individual responsibility (parcel level), landscape-wide fuel management (landscape level), and community engagement and enforcement (community level), the Unit creates a multi-layered defense against wildfires. Each level reinforces the others, forming a comprehensive approach that addresses wildfire risk from every angle.

This holistic strategy not only reduces the intensity and spread of wildfires but also provides critical support for fire suppression efforts. By reducing fuel loads and creating defensible zones, CAL FIRE ensures that fire personnel have the time, space, and resources needed to effectively combat wildfires. This coordinated effort improves firefighter safety, enhances suppression capabilities, and helps protect lives, property, and natural resources across the Amador-El Dorado Unit.

SECTION V: PRE- FIRE MANAGEMENT TACTICS

Parcel-Level Tactics: Defensible Space Inspections, Home Hardening, and Enforcement

The parcel-level strategy aims to reduce wildfire risk by ensuring that homeowners comply with defensible space regulations and implement home hardening measures. The following tactical objectives outline how CAL FIRE AEU uses various programs and resources to meet these goals:

Defensible Space Program

CAL FIRE AEU utilizes the Defensible Space Program to ensure that properties meet the necessary fire safety standards. Defensible space inspectors conduct inspections on both primary and accessory structures, focusing on properties in high-risk areas. These inspections are tracked using Field Maps, ensuring that compliance is documented, and follow-ups are conducted where necessary. The program targets vulnerable properties in the State Responsibility Area (SRA) and provides educational outreach on home hardening and fire prevention strategies.

Home Hardening

Home hardening is a critical component of a homeowner's strategy for protecting their property from wildfire. CAL FIRE AEU focuses on educating and informing residents about the importance of strengthening their homes to withstand fire threats. Through our Defensible Space Program and other educational efforts, we provide homeowners with guidance on how to improve their structure’s fire resistance, including recommendations for fire-resistant building materials, ember-resistant vents, and creating defensible space around structures.
By promoting home hardening measures, CAL FIRE helps residents reduce the vulnerability of their homes to wildfires. Homeowners are encouraged to make modifications such as installing ember-resistant roof coverings, using non-combustible siding materials, and sealing gaps around windows and doors. These efforts play a key role in enhancing a home’s ability to survive a wildfire, particularly when combined with proper defensible space practices. Through ongoing education and resources, CAL FIRE ensures that homeowners have the tools and knowledge needed to improve the resilience of their homes and contribute to overall community fire safety.

Operational personnel conducting defensible space Inspections

Engine companies play a key role in the Defensible Space Program by conducting inspections in their designated response areas. Each engine company in AEU is responsible for inspecting 300 properties annually, with a focus on high-risk homes. By using Field Maps, engine companies can prioritize areas that are most vulnerable to wildfire. This collaboration between engine crews and defensible space inspectors helps expand the inspection capacity and ensures that properties at the highest risk are addressed first. This tactic also enhances operational readiness, as firefighters become familiar with the structures they may need to protect during a fire.

Collaboration with Local Partners

CAL FIRE AEU works in close coordination with Local governments and local fire agencies to streamline defensible space inspections. By coordinating inspection areas and aligning efforts through a defensible space working group, CAL FIRE and local agencies ensure that resources are used efficiently, and that no property is overlooked. By developing a strategy for inspecting each unique parcel in the unit. Using a common reporting platform allows all parties involved to share data, track progress, and monitor inspection outcomes. This collaborative approach ensures that the parcel-level strategy is implemented effectively across the Unit.

Qualified Entity Program

To expand inspection capacity, CAL FIRE AEU supports the Qualified Entity Program, which enables local agencies and organizations to conduct defensible space inspections in alignment with CAL FIRE standards. This program helps ensure that vulnerable areas, particularly in underserved regions, receive attention. By training qualified entities, CAL FIRE extends its reach and supports local communities in managing their fire risk. This partnership enhances the Unit's ability to address wildfire risks across a larger geographic area.

Real Estate Transaction Inspections

In line with the civil code 1101.19, CAL FIRE and local agencies also conducts real estate transaction inspections for properties in the SRA. These inspections ensure that homes being sold meet defensible space requirements before they are transferred to new owners. This tactic helps integrate fire prevention into the real estate process and ensures long-term fire safety in communities at risk.

Leveraging Technology and Data Sharing

Technology and data sharing are key tools for improving data collection, decision-making, and collaboration across agencies. CAL FIRE AEU uses Field Maps to document defensible space inspections in real time, ensuring that inspection data is accurate and immediately accessible across all relevant divisions. This real-time data helps CAL FIRE track inspection progress, identify areas for follow-up, and prioritize inspection efforts based on the wildfire risk in each area.

A crucial tool under development is Vibrant Planet's Structure Exposure Score (SES), in collaboration with Vibrant Planet and CAL FIRE AEU. The SES tool assesses fire intensity, ember load, and annual burn probability for a given area, providing a quantified value on the likelihood that a wildfire will affect a structure. Once fully developed, the SES will be used to prioritize defensible space inspections in high-risk areas, allowing CAL FIRE to focus its resources on properties with the greatest need for mitigation.

Additionally, the SES tool will serve as a performance metric for evaluating the effectiveness of defensible space work and inspections over time. By comparing the SES values before and after implementing defensible space measures, CAL FIRE will be able to assess the impact of its inspections, home hardening efforts, and fuel reduction projects. This will enable CAL FIRE to refine its strategies and ensure that efforts are focused on the areas with the highest potential to reduce fire risk and improve community resilience.

Through the use of Field Maps and SES, CAL FIRE AEU is able to make data-driven decisions, better prioritize inspection efforts, and continuously evaluate the success of its wildfire prevention programs.

Damage Inspection Reports (DINS)

After wildfire events, Damage Inspection Reports (DINS) are conducted to evaluate the effectiveness of defensible space and home hardening in protecting structures. DINS provide critical feedback on what worked during a wildfire and which areas need improvement. This data helps refine fire resilience strategies, adjust home hardening standards, and enhance the Defensible Space Program for future use. DINS are crucial for identifying how well homes in vulnerable areas were protected, ultimately driving improvements to the parcel-level strategy. This is the evaluation piece.

Conclusion

These tactical objectives for the parcel-level strategy focus on ensuring that homeowners are prepared for wildfire through defensible space inspections, home hardening, and coordinated efforts with local partners. By implementing these tactics, CAL FIRE AEU addresses wildfire risk at the individual property level, with an emphasis on vulnerable areas. The use of dedicated inspectors, engine company involvement, and collaborations with local agencies ensures that the strategy is effective, scalable, and sustainable. Through these efforts, CAL FIRE AEU strengthens community resilience and reduces fire risk across the Unit.

Landscape-Level Tactics: VMP, Technology, Evaluation

At the landscape level, CAL FIRE AEU focuses on large-scale fuel reduction projects and strategic wildfire mitigation efforts aimed at reducing fuel loads, creating fire breaks, and improving fire resilience across communities, critical infrastructure, and natural ecosystems. These efforts are essential for ensuring that wildfires can be suppressed effectively, fire intensity is mitigated, and communities are protected. The following landscape-level tactics outline how CAL FIRE AEU is meeting the strategic goals of reducing wildfire risk and improving resilience across the Unit.

Vegetation Management Program (VMP)

CAL FIRE AEU aims to have a robust Vegetation Management Program (VMP) is a key tactic for reducing fuel loads and mitigating wildfire risk. The VMP targets both large-scale and small-scale projects, including forest thinning, prescribed fire, brush clearing, and the creation of strategic fire breaks. The program is implemented through a collaborative approach involving Unit Leadership, Battalion Chiefs, Foresters, engine companies, fire crews and external partners such as Fire Safe Councils (FSCs), Resource Conservation Districts (RCDs), and federal agencies. These efforts are designed to reduce wildfire intensity, improve firefighter access, and protect communities in the State Responsibility Area (SRA).

Leveraging Technology with the Vibrant Planet Platform

The Vibrant Planet Platform is a crucial tool developed in collaboration with the Vibrant Planet team to support CAL FIRE AEU's landscape-level wildfire mitigation strategy. This science and data-driven tool helps CAL FIRE prioritize fuel reduction and fire prevention efforts across large landscapes. By leveraging advanced geospatial modeling and scientific data, Vibrant Planet evaluates wildfire risk, forest health, and fire behavior, considering factors such as fuel loads, topography, and infrastructure vulnerabilities.

In addition to identifying high-risk areas for Vegetation Management Program (VMP) work, Vibrant Planet assesses co-benefits of mitigation efforts, such as ecological restoration, watershed health, and biodiversity improvements. This feature expands the platform's utility, aligning landscape-level projects with broader environmental and community resilience goals.

A key advantage of the Vibrant Planet Platform is its accessibility to cooperators at no cost. This platform is available for cooperators such as local governments, community groups, and other wildfire management agencies, providing them with the same cutting-edge wildfire risk assessment and landscape analysis tools that CAL FIRE uses. Through Vibrant Planet, cooperators can develop their Community Wildfire Protection Plans (CWPPs) or access existing projects using scientifically-backed data to identify priority areas for mitigation, fuel reduction projects, and prescribed fire planning.

The platform enables data-driven decision-making, allowing CAL FIRE to focus efforts on high-priority areas, reduce wildfire intensity, improve firefighter access, and enhance community protection. Vibrant Planet also provides continuous monitoring and feedback, allowing CAL FIRE to adjust strategies and improve the effectiveness of fuel reduction projects and other wildfire mitigation efforts.

By integrating Vibrant Planet's data with on-the-ground knowledge and Unit priorities, CAL FIRE ensures that resources are allocated efficiently and that projects are aligned with both wildfire risk reduction and long-term ecological goals. This tool is a key element in the Unit Fire Plan for the year, strengthening our approach to wildfire mitigation and resilience across the landscape.

Further details on the Vibrant Planet methodology and results can be found in the next section of the plan.

Prescribed Fire Program

Prescribed fire is a critical tactic for reducing fuel loads and restoring ecological balance in fire-adapted ecosystems. CAL FIRE uses controlled burns to reduce vegetation in areas with excessive fuel, effectively lowering the intensity of future wildfires. These burns not only create fire breaks and enhance firefighter safety but also promote native plant species and restore habitats for wildlife. Through carefully planned prescribed fires, CAL FIRE improves soil health, supports fire-resistant vegetation, and contributes to the overall ecology of the land.

In addition to traditional fuel reduction, CAL FIRE supports cultural burning practices, recognizing the importance of indigenous fire management techniques in maintaining ecological balance and restoring fire-adapted ecosystems. CAL FIRE collaborates with local tribes and groups such as the Prescribed Burn Association (PBA) to increase capacity for prescribed fire operations.

Fire Control Lines and Fuel Breaks

Creating fire control lines and fuel breaks is a key tactic for ensuring that wildfires can be effectively contained. These strategic lines give firefighters safe operational space and help prevent wildfires from spreading to critical infrastructure and vulnerable communities. CAL FIRE works with local agencies, state partners, and private landowners to establish fire breaks in high-risk areas. These lines are often enhanced by prescribed burns or mechanical thinning, providing firefighters with access points to combat wildfires effectively. Fire control lines are also critical for protecting evacuation routes, power lines, and water sources, ensuring that essential services are maintained during wildfire events.

Current Landscape-Level Projects

CAL FIRE AEU is actively engaged in a number of landscape-level fuel reduction and wildfire mitigation projects aimed at reducing the overall wildfire risk across the Unit. These ongoing projects, which have passed environmental reviews, are being implemented in collaboration with various partners and stakeholders. They include both large-scale and smaller, focused projects that target high-priority areas such as critical access routes, Wildland-Urban Interface (WUI) zones, and vulnerable communities.

Collaboration with Local and Federal Partners

CAL FIRE is largely not a landowner, so collaboration with local fire districts, federal agencies, and community partners is essential for implementing landscape-level fuel reduction projects. CAL FIRE AEU works closely with Fire Safe Councils (FSCs), Resource Conservation Districts (RCDs), and local agencies to align efforts, share resources, and maximize the impact of fuel reduction activities. These partnerships help ensure that projects are executed efficiently, meeting the Unit’s goals of enhancing fire resilience and improving fire suppression capabilities. Collaborative efforts with agencies like the U.S. Forest Service (USFS) and public utilities allow CAL FIRE to implement fuel reduction projects across jurisdictions, increasing the overall effectiveness and reach of wildfire mitigation efforts.

Grants and Partner Collaboration

CAL FIRE AEU plays an essential role in helping partners, such as Fire Safe Councils (FSCs), local agencies, and nonprofit organizations, develop meaningful and impactful fuel reduction projects. While CAL FIRE is a grantor in some situations, our focus is on guiding these partners in creating well-structured, data-driven fire plans that align with the Unit Fire Plan. These plans provide clear objectives and opportunities for grant applicants, ensuring that projects meet both local and regional wildfire risk reduction goals.

By working closely with partners, CAL FIRE helps facilitate access to wildfire prevention grants, which support the Unit's Vegetation Management Program (VMP) and other fire mitigation efforts. FSCs, RCDs, and local agencies are the primary conduits for bringing these grants into the Unit, enabling us to expand our fuel reduction projects and further our shared goal of improving fire resilience across the region.

Project Tracking and CALMAPPER

Effective project tracking is a critical component of CAL FIRE AEU's landscape-level mitigation strategy. One of the key tools for this is CALMAPPER, a data management system used to track and validate fuel reduction projects across the Unit. CALMAPPER allows CAL FIRE to monitor the progress of ongoing projects, ensuring that each initiative aligns with the goals outlined in the Unit Fire Plan.

Through CALMAPPER, CAL FIRE collects and organizes data on project locations, treatment methods, and project status, providing real-time updates and visibility on the scope and effectiveness of each project. This tool ensures consistency in reporting, allowing Unit staff and cooperators to track progress and make adjustments as necessary. Additionally, this information is shared on the Wildfire Task Force Interagency Treatment Dashboard, further enhancing transparency and coordination across various agencies and partners involved in wildfire mitigation.

Project Effectiveness – CAL FIRE (FTER) Fuels Treatment Effectiveness Reporting

CAL FIRE's Fuels Treatment Effectiveness Reporting (FTER) program is a critical tool for evaluating how fuel reduction projects impact wildfire behavior and support suppression efforts. By documenting the influence of fuel treatments on fire spread, intensity, and access, FTER helps demonstrate the role of vegetation management activities in protecting lives, property, and natural resources across California. Treatments eligible for evaluation include projects completed within the past seven years—such as fuel breaks, broadcast burns, right-of-way clearances, and grant-funded fuel reduction work—undertaken through CAL FIRE programs like the Vegetation Management Program (VMP), California Vegetation Treatment Program (CalVTP), or CFIP, as well as work funded through Wildfire Prevention and Forest Health grants.

Positive impacts reported through FTER include reduced fire intensity, slowed or halted fire spread, and enhanced ingress and egress routes for fire suppression personnel and civilian evacuation. Treatments may also directly contribute to containment by serving as primary or secondary control lines. Within the Amador-El Dorado Unit, evaluating treatment effectiveness allows us to better understand which projects improve operational safety and community resilience, while guiding future planning and investment in fuel reduction efforts.

Utilizing CAL FIRE Crews for Fuel Reduction and Prescribed Fire

CAL FIRE AEU's large workforce of fire crews plays a central role in landscape-level mitigation efforts. These crews are responsible for conducting fuel reduction activities, participating in prescribed fire operations, and engaging in training exercises designed to improve fire suppression readiness. In addition to supporting VMP projects, crews can also conduct vegetation thinning, brush clearing, and controlled burns as part of their ongoing training. This approach not only helps build crew capacity but also directly contributes to reducing wildfire risk and enhancing firefighter effectiveness during fire events.

Improving Environmental Review Capacity

Environmental review, particularly CEQA (California Environmental Quality Act) compliance, can be a challenge in completing landscape-level projects. CAL FIRE is focused on increasing its capacity to complete environmental reviews more efficiently. By expanding internal review capabilities and partnering with other agencies to assist with environmental assessments, CAL FIRE can streamline the CEQA process and reduce delays in project implementation. This improvement allows CAL FIRE to ensure that high-risk areas are treated in a timely manner. A specific example includes converting existing dozer lines into fuel reduction areas that can be maintained as control lines for future wildfire suppression efforts.

VMP Battalion Chief Position

The creation of the VMP Battalion Chief position is designed to increase the pace and scale of VMP projects in CAL FIRE AEU. This position works closely with the Unit VMP forester to ensure that projects are planned, implemented safely, and aligned with Unit priorities. The VMP Battalion Chief ensures clear communication between CAL FIRE, Resource Management, cooperating agencies, and field personnel to ensure environmental compliance and project implementation. This role is instrumental in coordinating projects, managing budgets, overseeing contractor compliance, and ensuring that landowner agreements and cooperative agreements are in place for successful project execution.

Conclusion: Landscape-Level Tactics for Wildfire Risk Reduction

The landscape-level tactics outlined above play a crucial role in reducing wildfire risk and protecting communities across CAL FIRE AEU. By leveraging Vibrant Planet's technology, collaborating with local and federal partners, utilizing fire crews, expanding environmental review capacity, and appointing a VMP Battalion Chief, CAL FIRE ensures that landscape-level fuel reduction projects are effectively prioritized and implemented. These efforts help enhance fire resilience, firefighter safety, and community protection, contributing to long-term wildfire risk reduction across the Unit.

Community Level Tactics: Outreach, Education, Enforcement.

CAL FIRE AEU's success in wildfire prevention and resilience is deeply rooted in our strong partnerships with local community groups. Collaboration with Fire Safe Councils (FSCs), Resource Conservation Districts (RCDs), and other key local entities is vital in addressing wildfire risk and building community-wide fire resilience. These relationships are the foundation for creating resilient communities—engaging residents and local leaders to take action in reducing fire risk, improving preparedness, and fostering a culture of fire safety. Through these partnerships, CAL FIRE plays an active role in supporting community-based initiatives, providing invaluable expertise, and empowering communities to achieve their fire prevention goals.

Community Outreach and Education

CAL FIRE AEU runs a robust community outreach program designed to engage residents and raise awareness about fire prevention. The program is supported by a dedicated Public Information Officer (PIO) and several other qualified PIOs, ensuring that fire prevention initiatives and operational updates are effectively communicated. The PIO team plays a key role in distributing information through public forums, fairs, school education programs, Fire Prevention Week activities, expos, and local community events. These efforts are further enhanced by a strong social media presence, which allows CAL FIRE to quickly disseminate important information about home hardening, defensible space, enforcement actions, and emergency incidents.

CAL FIRE collaborates with other agencies and organizations that share similar goals in fire prevention, creating a force multiplier for outreach efforts. By participating in public outreach groups and partnering with local agencies, CAL FIRE expands its reach and strengthens its fire prevention impact across the region. This collaborative approach ensures that fire prevention messages are delivered effectively to diverse communities throughout the Unit.

Fire prevention activities are tailored to be both locally relevant and informed by the latest research and data in wildfire resiliency. CAL FIRE aligns its efforts with lessons learned from other communities and the evolving science of wildfire prevention. By integrating these insights, CAL FIRE ensures that its strategies are based on the best available knowledge and are adaptable to the unique needs of the Amador-El Dorado Unit.

Fire Risk Reduction Community List

The Fire Risk Reduction Community List is a designation issued by the California Board of Forestry to recognize communities actively engaged in reducing wildfire risk and improving fire resilience. Being placed on this list signifies that a community has met best practices in wildfire preparedness and resilience. This designation opens access to specific funding opportunities and resources for wildfire prevention and mitigation efforts. Currently, El Dorado County holds this designation, and CAL FIRE AEU is working with local partners to extend this recognition to other areas across the Unit.

Firewise Communities

Being a Firewise Community provides significant benefits, including increased fire resilience, access to resources and funding for mitigation projects, and stronger community collaboration. Firewise communities implement fire-resistant landscaping, defensible space, and other safety measures that reduce wildfire risk to homes and infrastructure. Additionally, these communities gain recognition and credibility, which can attract funding, resources, and support from local, state, and federal agencies.

CAL FIRE AEU has a Firewise Coordinator who works closely with local agencies, Fire Safe Councils, and residents to help establish and support Firewise Communities across the Unit. The Firewise Coordinator facilitates the development of fire-prepared communities, offering expertise, resources, and guidance to help areas meet Firewise USA® standards. Through these collaborative efforts, CAL FIRE ensures that more communities in the Unit are equipped to reduce fire risk and enhance wildfire preparedness.

Fire Safe Councils

Our collaboration with Fire Safe Councils (FSCs) is integral to CAL FIRE AEU's wildfire prevention efforts. These partnerships allow CAL FIRE to provide expertise and actively participate in committees within the Fire Safe Councils, ensuring that projects are well-coordinated, meet fire prevention standards, and are implemented efficiently. We also work closely with FSCs on grant opportunities for fuel reduction and mitigation projects. Additionally, CAL FIRE supports FSCs by attending meetings, assisting with educational initiatives, and providing training for programs like the Qualified Entity Program.

These strong relationships foster a shared commitment to reducing wildfire risk, improving community resilience, and ensuring safer environments for residents. By coordinating efforts with FSCs, CAL FIRE enhances the effectiveness of wildfire prevention and builds a collaborative approach to fire safety across the Unit.

Office of Wildfire Prevention and Resiliency (OWPR)

The Office of Wildfire Prevention and Resiliency (OWPR) in El Dorado County is a key partner in CAL FIRE AEU's efforts to enhance wildfire resilience across the region. The county's strong commitment to wildfire resiliency is evident in our ongoing collaboration, particularly in areas such as improving defensible space standards, coordinating community outreach, and managing fuel reduction projects like Webber Creek. Through this partnership, CAL FIRE and OWPR work together to align efforts, ensuring that fire prevention strategies are well-coordinated and impactful.

One of the most effective tools in our collaboration is the Coordination Group, which brings together local leaders on a regular basis to discuss wildfire resiliency issues, share insights, and provide guidance on addressing these challenges. This group plays a crucial role in shaping local strategies and ensures that the community is well-prepared to tackle wildfire risks in a unified, effective manner.

Tahoe Fire and Fuels Team

The Tahoe Fire and Fuels Team (TFFT) plays a crucial role in CAL FIRE AEU's broader wildfire resilience efforts. While CAL FIRE isn't directly involved in all TFFT activities, we collaborate closely with the team to align fuel reduction projects, wildfire mitigation strategies, and emergency response planning, particularly in the Lake Tahoe Basin. This partnership ensures that our efforts complement each other, enhances firefighter safety, and strengthens community resilience across the region. By working together, CAL FIRE and TFFT improve wildfire risk management and ensure a coordinated, effective approach to fire prevention across multiple jurisdictions.

Relationships and Information Sharing

CAL FIRE AEU values the relationships we've built with local utilities, including electric, water, and transportation agencies, as they are integral to the critical infrastructure in the Unit. These utilities are essential not only for incident support during a wildfire but also for community rebuild efforts in the aftermath of a destructive event. By maintaining strong connections with these agencies, we can coordinate more effectively, ensuring that fire prevention efforts align with the protection of these vital services. These entities understand the importance of safeguarding their assets through comprehensive wildfire policies, recognizing that their resilience is closely tied to the overall resilience of the communities they serve. Through these partnerships, CAL FIRE gains valuable insights into landscape-level projects and planning, allowing for better coordination, more efficient use of resources, and enhanced wildfire risk management across the Unit.

Planning

Community Wildfire Protection Plans (CWPPs)

Community Wildfire Protection Plans (CWPPs) are crucial for guiding wildfire risk reduction efforts at the local level. These plans identify high-risk areas, set priorities for mitigation, and outline actions that will reduce the threat of wildfires to people, homes, and infrastructure. CAL FIRE plays a key role in creating and supporting CWPPs, collaborating with local agencies, Fire Safe Councils, and community groups to ensure that each plan is thorough and aligned with regional wildfire prevention goals.

Currently, CAL FIRE AEU has a recently updated CWPP for the Tahoe Basin, and two additional CWPPs are in development in Western El Dorado County and Amador County. These plans help communities assess wildfire risks and identify strategies for fuel reduction, improving evacuation routes, and enhancing community resilience. CAL FIRE supports the creation of these plans by providing technical expertise, guidance, and access to tools like the Vibrant Planet Platform and the CAL FIRE CWPP Toolkit, which assist in identifying high-risk areas, prioritizing mitigation actions, and strengthening overall planning efforts.

Fire Safe Regulations

The Fire Safe Regulations (FSRs) are a key component of CAL FIRE AEU's long-term strategy for addressing the wildfire problem and ensuring sustained resilience across the State Responsibility Area (SRA). These regulations set minimum development standards that focus on essential elements such as access, water supply, addressing, and fuel breaks, all of which are designed to reduce wildfire risk. CAL FIRE works closely with local planning agencies to ensure these standards are incorporated into new community designs, making sure that developments are better prepared to withstand the impacts of wildfires.

In collaboration with local planning agencies, CAL FIRE ensures that critical features like safe access routes for emergency responders, an adequate water supply for firefighting, proper addressing for visibility, and effective fuel breaks are included in new developments. This partnership plays a central role in enhancing community resilience and supports the overall wildfire mitigation strategy. By enforcing the Fire Safe Regulations, CAL FIRE helps to integrate fire prevention measures into the very structure of new communities, ensuring long-term wildfire resilience across the Unit.

Fire Safe Plans

Fire Safe Plans are a critical requirement for new developments in El Dorado County. These plans are designed to address the specific conditions of each project and outline the necessary mitigation efforts and strategies to ensure that new developments meet fire safety requirements. Fire Safe Plans detail measures such as fuel reduction, defensible space, evacuation routes, and access for emergency responders to ensure the safety of residents and structures in the event of a wildfire. CAL FIRE AEU works closely with local planning agencies and developers to review and support the development of these plans, ensuring they align with both state and local regulations. By integrating these requirements into the development process, Fire Safe Plans help to create fire-resilient communities and reduce the risk of catastrophic wildfires.

Enforcement

Enforcement is a critical component of CAL FIRE AEU's wildfire prevention strategy, ensuring compliance with fire safety regulations and laws to mitigate wildfire risk across the Unit. CAL FIRE Law Enforcement officers are dedicated to investigating wildfire causes, particularly human-caused ignitions, which account for a significant portion of wildfire incidents. These officers conduct investigations into suspicious fire activity, work to identify the source of ignitions, and collaborate with local law enforcement to address any violations of fire-related laws. Their efforts are vital to ignition management and the prevention of future wildfires.

Prevention and Enforcement

The Prevention Bureau plays a key role in enforcing forest and fire laws across the Unit, ensuring compliance with Public Resource Codes, Penal Codes, and Health and Safety Codes. This includes overseeing that fire safety standards are met and addressing violations when necessary, whether through education, corrective actions, or enforcement measures. The work of the Prevention Bureau ensures that all parties are held accountable for maintaining safe practices that help protect communities from wildfire risks.

In addition, CAL FIRE's Ignition Management Plan (outlined in Appendix C) provides a proactive approach to identifying and managing risks associated with human-caused ignitions. Through a combination of investigation and enforcement, CAL FIRE works to minimize fire-starting activities and fosters a safer environment for all residents. By blending these efforts with education and community outreach, CAL FIRE ensures that enforcement is a supportive and integral part of the broader wildfire prevention strategy.

SECTION VI VIBRANT PLANET PLATFORM

Description of Vibrant Planet Platform

The Vibrant Planet Platform represents a significant advancement in CAL FIRE AEU's wildfire risk mitigation strategy. Developed as a pilot program in AEU, this cloud-based decision support tool provides critical insights into our landscape and community dynamics. Through a collaborative data curation process, CAL FIRE personnel and our partners worked together to incorporate detailed data layers that highlight the Unit's highest protection priorities, such as critical access routes, WUI (Wildland-Urban Interface) areas, subdivision reviews, and other vulnerable features. With over 2 million acres in the Unit evaluated, this tool enables precise analysis and the identification of high-priority areas for Hazardous Fuels Reduction efforts.

The Vibrant Planet Platform integrates data from various sources, including utilities (e.g., EID's wooden water delivery systems), CAL FIRE's subdivision review, and layers such as WUI, communication infrastructure, emergency services, and critical structures. This data-driven methodology allows us to assess wildfire risks and prioritize mitigation actions based on the highest resilience opportunities. While not every acre in the Unit can be treated, the platform enables CAL FIRE to focus resources where they will have the most significant impact in reducing wildfire risk and enhancing community resilience.

Additionally, Vibrant Planet's flexibility allows for quick updates when changes occur in the landscape, such as completed fuel mitigation projects or wildfire events. This real-time adaptability helps ensure that CAL FIRE can efficiently adjust priorities and respond to new risks as they emerge, maintaining a dynamic and responsive approach to wildfire resilience.

Integrating Cooperators into CAL FIRE's Strategic Vision

Another critical feature of the Vibrant Planet Platform is its ability to foster collaboration among cooperators, with the added benefit that CAL FIRE is funding the development and subscription costs. This means that cooperators—such as local fire districts, Fire Safe Councils, and other stakeholders—can access the platform at no cost. This is a key part of CAL FIRE's strategy to maximize the platform's impact by making it available to partners across the region, enabling them to perform their own planning and identify high-priority areas for fuel reduction and mitigation. By using Vibrant Planet's planning areas, cooperators can align their efforts with CAL FIRE's strategic priorities, identifying areas where their wildfire mitigation goals intersect with CAL FIRE's initiatives. This collaborative approach ensures that resources are efficiently coordinated across agencies, resulting in more effective and streamlined wildfire prevention efforts. The platform's ability to highlight areas of mutual interest also makes it an invaluable tool for strengthening interagency cooperation and improving overall wildfire resilience.

In addition to fostering collaboration, the Vibrant Planet Platform helps ensure that cooperators' projects align with CAL FIRE's priorities. Even if a local group proposes a project that isn't explicitly outlined in the plan, using the platform allows them to align their efforts with CAL FIRE's identified priorities, ensuring the project fits within the Unit's broader wildfire resilience strategy. This alignment makes it easier for CAL FIRE to support the project, as it directly contributes to the Unit's strategic goals, and ensures the work being done is relevant to the Unit's fire mitigation priorities. This approach creates a more unified and effective effort across all stakeholders, helping us maximize the impact of our wildfire prevention work.

Structure Exposure Score (SES) in Vibrant Planet Platform

The Structure Exposure Score (SES) is a key tool in the Vibrant Planet Platform that evaluates the likelihood of a structure being impacted by wildfire, considering factors such as fire intensity, ember load, and annual burn probability. This score provides a data-driven approach to assessing the risk to individual structures, helping to prioritize areas where wildfire mitigation efforts should be focused. The SES will be instrumental in guiding CAL FIRE AEU's strategies for defensible space inspections, home hardening, and fuel reduction projects, ensuring that resources are directed toward the highest-risk areas.

Currently in development, the SES tool will enable CAL FIRE and its partners to identify and prioritize the most vulnerable areas for defensible space inspections. By using the SES to assess structure risk, we can focus inspections on properties most likely to benefit from mitigation measures. Additionally, the SES will serve as a performance metric, allowing CAL FIRE to evaluate the effectiveness of past mitigation efforts and refine strategies for future projects. By incorporating the SES into our planning framework, CAL FIRE AEU ensures that its wildfire prevention efforts are not only data-driven and targeted but also aligned with the Unit's overall goals of reducing wildfire risk and increasing community resilience.

Platform Data and Science

Synthetic CHM
The Platform utilizes a three-dimensional (3D) structure dataset to assess landscape vegetation. To create this 3D structure dataset, Vibrant Planet uses dozens of publicly-available and widely-used datasets including lidar and data from the USDA, National Agriculture Imagery Program (NAIP), LANDFIRE, USGS, and USFS.

While Lidar is one of the most powerful remote sensing datasets to gather 3D vegetation detail, it is often expensive ($.50-$1 per acre) and can be out of date as soon as vegetation changes – whether from disturbance events such as wildfire or from Hazardous Fuels Reductions like mechanical thinning. Because of these limitations, Vibrant Planet uses machine learning algorithms, trained on lidar, to build a Synthetic Canopy Height Model (Synthetic CHM) that supplements additional high-quality and real-time landscape assessment data. Vibrant Planet Synthetic CHM utilizes high spatial and temporal resolution imagery to identify individual trees and approximate their height, as well as other helpful metrics including wood product value, and aboveground biomass.

Strategic Areas, Resources, and Assets (SARAs)

In order to build a plan for landscape and community resilience or cross-boundary wildfire Hazardous Fuels Reduction, the Platform identifies and evaluates landscape features with societal value. Within the Platform these features with societal value are called Strategic Areas, Resources, and Assets (SARAs).

To be included within the Platform, all SARAs met the following criteria: They can be represented with geospatial data, they can be affected by wildfire, and they have societal value. For example: Electrical transmission lines have societal value by providing power to communities, they can be mapped on the landscape, and they can be affected by wildfire.

The AEU deployment of the Platform includes a comprehensive set of Hazardous Vegetation Risk Areas (HVRAs). These datasets were evaluated and supplemented by AEU and their collaborators. They include:

Assets	• **Above Ground Water Delivery (Wooden) Critical Structures** • **Dams** • **Energy Facilities** • **Structure Transmission Zone** • **Structures** • **Transmission Lines** • **Water Facilities**
Safety	• **CAL FIRE Subdivision Review*** • **CAL FIRE WUI**** • **Communication Infrastructure** • **Critical Access Roads** • **Emergency Service Facilities**
Water	• **High Erosion Potential** • **Lakes** • **Perennial Rivers and Streams**

Recreation	• **Recreation Areas** • **Trails**
Wildlands Health	• **Aboveground Live Biomass** • **Freshwater Wetlands** • **Montane Mixed-Conifer - Relative Stand Density Index** • **Riparian Areas**
Biodiversity	• **Aspen Highly Suitable Habitat** • **Beaver Suitable Habitat (Modeled)** • **California Black Oak**
Ecological Commodity	• **Managed Timberlands**
Science & Culture	• **California Black Oak Acorn Harvesting** • **Historic Features** • **Monitoring Stations**

*Subdivision review identifies neighborhoods with 30 or more homes that have only one road in and out, used to assess and reduce evacuation risks during wildfires.
**Wildland-Urban Interface (WUI) refers to areas where neighborhoods or subdivisions directly border wildland vegetation; while Intermix represents housing developments interspersed in an area dominated by wildland vegetation that is susceptible to wildfire.

SARA Data Sources

To support analysis, planning, and the development of Strategic Project Areas, AEU and Vibrant Planet integrates data curated from local, state, and federal sources. These datasets include vegetation, topography, climate, infrastructure, wildfire history, and ecological/cultural assets-providing a comprehensive foundation for analysis. This curated data enables more accurate identification of hazards, strategic planning of fuel reduction projects, and alignment with statewide fire resiliency goals. The details of the reference tata can be found on the CAL FIRE Amador El Dorado Unit Supplemental Tech Report. Contact unit personnel for more information.

Land Ownership

Within the Platform, land ownership is broken into classifications of federal, state or local government managed lands as well as further classification of private lands into large landowners, defined by ownership of a contiguous parcel of 600 acres or larger, and other landowners defined by ownership of a contiguous parcel of less than 600 acres. Ownership data for public lands is sourced from the Protected Areas Database of the United States or PAD-US (U.S. Geological Survey Gap Analysis Project (GAP), 2022), while large landowner information is locally or commercially sourced data (The Regrid Data Store, 2022).

Recognizing ownership patterns is critical because wildfire risk does not respect jurisdictional boundaries. Federal lands, local government properties, and privately owned parcels often abut state responsibility areas (SRA), creating mutual threat zones where wildfire hazards can impact multiple ownerships simultaneously. By using the Platform to evaluate hazards across these boundaries, CAL FIRE AEU and its partners can prioritize projects that provide shared benefits—reducing fuels, improving landscape resilience, and enhancing community protection on both sides of ownership lines. Collaborative identification and treatment of these mutual threat areas is essential to creating a wildfire resilient region.

Wildfire Hazard

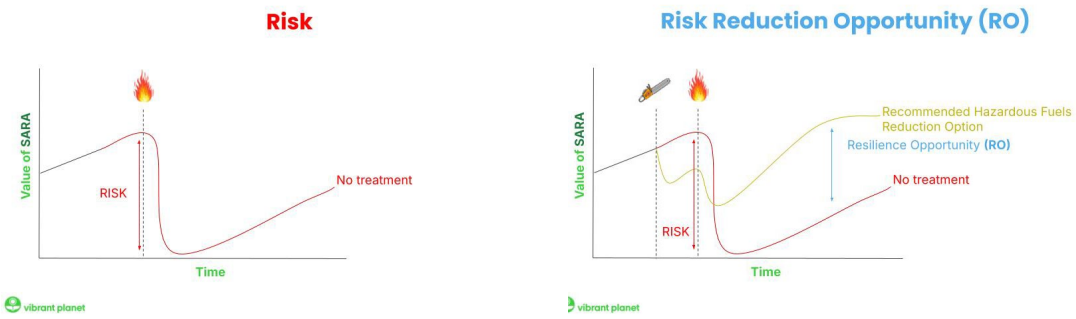
To calculate wildfire hazard, Vibrant Planet models both burn probability and fire intensity. These models are conducted by Pyrologix, a Vibrant Planet company. Areas with the highest wildfire hazard generally contain the greatest combination of burn probability and fire intensity.

- Burn probability: The probability that a geographic location (30-m pixel) will experience a wildland fire within a given timeframe. Modeled using FSim, which simulates the growth and behavior of hundreds of thousands of large fire events, based on historical fire occurrences, weather, terrain, and fuel.
- Fire intensity: The flame length that a given pixel is likely to experience during a wildfire event. This calculation uses the wildEST model developed by Pyrologix which performs 200+ simulations and uses local fuel, weather, and topography to generate estimates of contemporary flame lengths within a given pixel.

Opportunity to Reduce Wildfire Risk

Within the Platform, Vibrant Planet calculates a unique Risk Reduction Opportunity (RO) score for specific geographic locations known as management units. Each management unit may contain multiple SARAs and each landscape is made up of thousands of management units.

To calculate the RO score, each SARA in a management unit is exposed to the modeled wildfire hazard to determine potential loss in value due to wildfire, also known as risk. The Platform then analyzes all Hazardous Fuels Reduction options to reduce the risk and determines a single ‘recommended’ Hazardous Fuels Reduction option that reduces the most amount of risk to the SARA. See the diagrams and further explanation below.



The graph on the left shows the loss in value of a SARA following a wildfire (risk). The graph on the right shows the difference in SARA value following a wildfire with no Hazardous Fuels Reduction vs. the value following a Hazardous Fuels Reduction action by implementing the ‘recommended’ Hazardous Fuels Reduction option selected by the platform. The difference in SARA value between no action/post modeled wildfire and post-implementation action/post modeled wildfire is RO.
Vibrant Planet calculates RO for each SARA in a management unit and when multiple SARAs/Objectives are present in a management unit, their scores are combined.

Unit Fire Plan Methodology

Through the use of the Platform, AEU staff conducted a thorough analysis of wildfire hazard, risk to community and landscape values such as homes, critical access roads, and WUI areas, as well as the feasibility of potential Hazardous Fuels Reductions. This analysis was used to develop Strategic Project Areas across the Amador-El Dorado Unit (the Unit).

The Strategic Planning Areas represent the areas within the Unit that have a combination of:

- The greatest risk to emphasized values
- The greatest risk reduction opportunity (RO) if/when adjacent hazardous fuels are reduced

Planning at the Division Level

To account for ecological and sociological variation across the unit, planning areas were identified within three Divisions - North, South, and East. Planning at the Division level enabled Unit staff to plan within locations containing similar wildfire hazard and a similar distribution of values-at-risk.

Leveraging Vibrant Planet for Strategic Project Planning and Evaluation

The Vibrant Planet platform is being used by CAL FIRE AEU to evaluate and refine *Strategic Project Areas* by modeling treatment scenarios and exploring fuels reduction strategies. This tool allows for advanced landscape-level planning, where project benefits can be analyzed in terms of risk reduction, community protection, ecological benefit, and feasibility. Vibrant Planet can also serve as a review framework for outside partners and grant applicants to align proposed projects with CAL FIRE AEU's strategic goals and planning methods—ensuring funding is directed toward the highest-impact areas that meet the unit’s wildfire resilience goals.

Leveraging Vibrant Planet for Strategic Project Planning and Evaluation

The Vibrant Planet platform will be used by CAL FIRE AEU to evaluate and refine *Strategic Project Area* by modeling treatment scenarios, estimating costs, and exploring alternative fuels reduction strategies. This tool allows for advanced landscape-level planning, where project benefits can be analyzed in terms of risk reduction, community protection, ecological benefit, and feasibility. Vibrant Planet can also serve as a review framework for outside partners and grant applicants to align proposed projects with CAL FIRE AEU's strategic goals and planning methods—ensuring funding is directed toward the highest-impact areas that meet the unit’s wildfire resilience goals.

Value-at-risk Emphasis

Within each Division, Strategic Planning Areas were designed to protect lives, property, and their associated values-at-risk, also known as Strategic Areas, Resources, and Assets (SARAS). Key SARAs emphasized wildfire risk reduction included:

- Structures and wildfire transmission zones to structures
- Critical Access Routes
- Public Utilities and Infrastructure
- Firefighter Operational Space within the Wildland Urban Interface & Intermix
- CAL FIRE Subdivision Review Index areas
- Emergency Facilities and Communication Infrastructure
- WUI Interface
- WUI Intermix
- All remaining areas within each Division

Hazardous Fuels Reduction goals vary by geographic area. In WUI Interface, potential Hazardous Fuels Reduction actions focus on preventing fire spread to structures and initiation of urban conflagration, while in WUI Intermix, potential Hazardous Fuels Reduction actions may focus more heavily on maintaining safe operational space for firefighters by reducing predicted flame lengths and fire rate of spread.

In addition, Critical Access Routes were emphasized and prioritized to identify potential Strategic Planning Areas across the entirety of the Unit as a stand-alone, additive planning exercise.

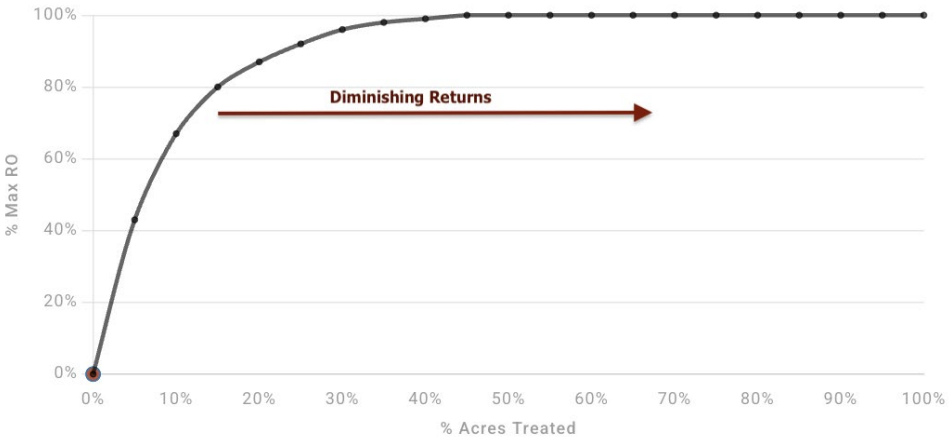
To address these unique emphasis opportunities, SARAs within the Vibrant Planet Platform are grouped into categories such as assets (e.g. structures and utilities) and safety (e.g. critical access roads or WUI defense zones). Each category was assigned an emphasis weighting 0–5, with 5 being highest. The following emphasis weights were used in all Divisions:

- WUI Interface - Assets: 5; Safety: 3
- WUI Intermix and Subdivision Review Index - Safety: 5; Assets: 3
- Remaining Areas - Safety: 2; Assets: 1
- Critical Access Routes - Safety 5 (emphasized across the entire unit stand-alone, additive planning exercise)

The emphasis weights were selected based on our unit's primary goal of protecting communities and residents. By prioritizing assets, we focus on enhancing community protection. Simultaneously, emphasizing safety for critical access routes ensures that our planning efforts prioritize the safety of people, facilitate effective resource deployment, and support efficient evacuations

Hazardous Fuels Reduction Targets

Risk reduction opportunity (RO) is not evenly distributed across the landscape. SARAs tend to be clustered in certain areas (e.g. around communities), meaning some locations face disproportionately higher risk. Treating the top 10% of the most at-risk areas on the landscape will generally be more efficient in reducing landscape-wide risk than the next 10% of areas and so on (see graph below).



The Strategic Planning Areas identified within the Unit are specifically designed to optimize efficiency in reducing wildfire risk, taking into account our limited resources for hazardous fuels reduction. These areas collectively cover approximately 5% of the AEU's total acreage but contribute to more than 50% of the Return on Investment (ROI). This outcome metric was pivotal in determining our Strategic Project areas, emphasizing the highest return on investment rather than pursuing arbitrary metrics such as treated acreage or specific treatment types. This approach aligns closely with the unit's goals and priorities, ensuring that our efforts yield the greatest impact in mitigating wildfire risk.

Mapping Division Strategic Planning Areas

Two sets of Strategic Planning Areas were created for each division based on the value-at-risk emphasis and Hazardous Fuels Reduction targets described above.

First, using the efficiency graph above, the AEU staff targeted 4% of the total division acreage as this captured the Strategic Planning Areas that would have the highest risk reduction efficiencies. The Strategic Planning Areas here focus primarily on the WUI Intermix and Subdivision Review Index areas as much of the division's risk profile is concentrated within those geographic areas. This resulted in the following risk reduction opportunity:

- North: 30% RO
- South: 60% RO
- East: 70% RO

Wildland-Urban Interface (WUI) geographic areas, despite having relatively lower wildfire hazard scores and risk profiles compared to WUI Intermix, remain a high priority for risk reduction within the Unit. Recent events, such as fires in Southern California and other urban conflagrations, have demonstrated that once fire enters a WUI interface community, the potential for structure-to-structure transmission becomes critical. By focusing on hazard identification in WUI interface areas, our goal is to minimize the risk of urban conflagrations.
To account for this, second Strategic Planning Areas were created focusing solely on WUI Interface.

Strategic Planning Areas identified in WUI Interface geographic cover ~1% of the total division acres but targeted significantly higher risk reduction rates. This resulted in the following risk reduction returns within WUI Interface:

- North: 50% RO
- South: 36% RO
    - *Note: Wide distribution of risk within WUI Interface in this division reduced the efficiency of projects.*
- East: 55% RO

CAL FIRE - AEU Review

During our review of the outcomes from the Vibrant Planet platform, we actively involved our field battalion chiefs to validate our process and verify our findings. This collaborative effort was rooted in rigorous data analysis and scientific methodologies aimed at identifying areas with the greatest potential for impactful interventions. Engaging our battalion chiefs ensured that our strategies and conclusions were thoroughly vetted against on-the-ground realities and operational insights, enhancing the reliability and relevance of our risk reduction efforts.

Unit Strategic Planning Areas

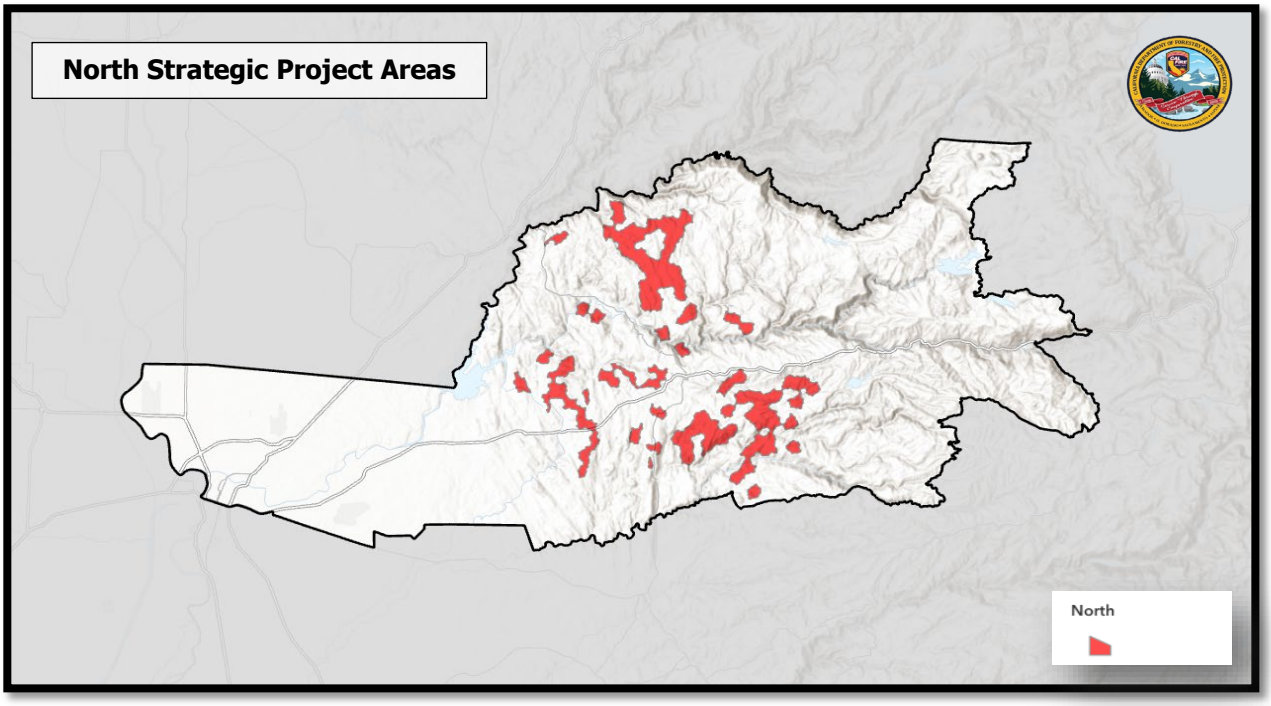
The following are the three strategic planning areas North, East, and South with the outcomes from the use of the Vibrant Planet Platform. Greater detail on the planning area maps can be seen on the AEU Story Map.

North Division

The **North Division** Planning Area of CAL FIRE's Amador-El Dorado Unit (AEU) encompasses a large portion of El Dorado County's western slope, spanning over **945,000 acres** from the foothills to high mountain terrain. This region is home to a population of approximately 200,000 residents, many of whom live in rural, forest-adjacent areas classified as wildland-urban interface (WUI). The population includes a mix of retirees, working professionals, and families who reside in scattered, often isolated developments embedded within heavy vegetation. A significant number of structures in the area were built prior to the adoption of modern WUI building standards, which increases their vulnerability to wildfire due to limited defensible space, flammable building materials, and difficult access.

The landscape of the North Division varies sharply by elevation, with lower foothill areas dominated by grassy oak woodlands and chaparral, and higher elevations transitioning into dense mixed conifer forests. These diverse vegetation types form continuous, highly flammable fuel beds—especially during California's prolonged dry seasons and drought cycles. When combined with steep terrain and a dispersed population, these conditions create serious challenges for emergency response, evacuation, and fire suppression. To improve wildfire resiliency, the North Division requires ongoing investment in vegetation management, defensible space efforts, public education, and strong collaboration between local, state, and federal partners.

The North Division (Division) covers 460,579 acres of CAL FIRE Direct Protection Area and is the largest division in the Amador-El Dorado Unit. It includes CAL FIRE Battalions 1, 2, and 5. The Division also contains the highest number of acres designated as WUI. Within its boundaries, there are 31,010 acres designated as WUI Interface and 170,520 acres as WUI Intermix. The Division includes 85 subdivisions currently under the Subdivision Review Program and approximately 392,504 structures exceeding 400 square feet in size.



Assessment Table

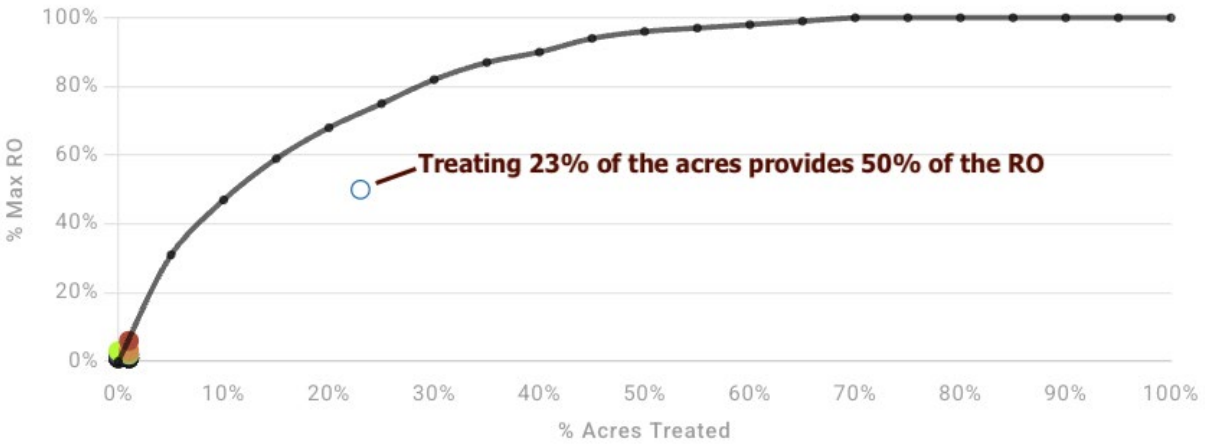
The North Division Assessment goals are to reduce the greatest amount of risk to Safety and Asset values-at-risk (*see 'Values-at-Risk' discussion above*) with the most efficient hazardous fuel reduction actions (*see 'Hazardous Fuels Reduction Targets' and 'Mapping Division Strategic Project Areas' discussion above*). The table below summarizes the North Division Assessment.

Area of Assessment	Total Acres	Strategic Project Areas	% of Assessment Area	Predicted Risk Reduction
WUI Interface	31,010 acres	7,037 acres	23%	50%
Full Division w/ emphasis on WUI Intermix + Subdivision Review	936,488 acres	37,591 acres	4%	30%
		Acres prioritized in both assessments		*296 acres*
		Total Proposed Project Areas		**44,332 acres**

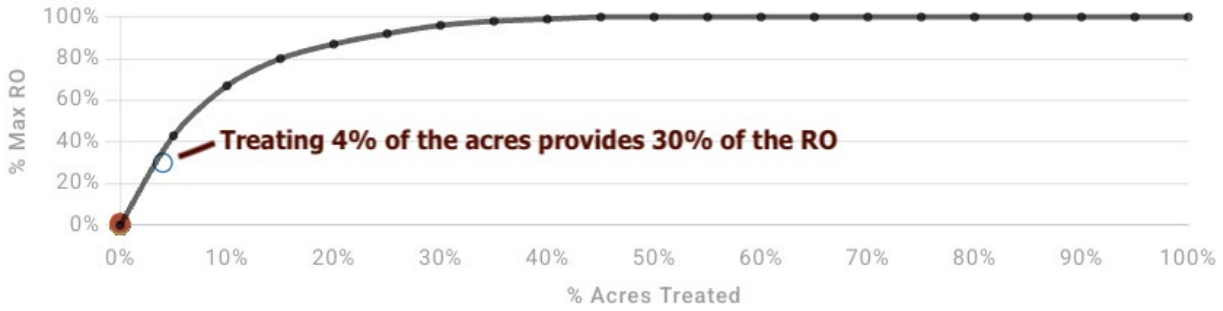
Risk Reduction Efficiency Graphs

As discussed in *Hazardous Fuels Reduction Targets (*above), Risk Reduction Opportunity (RO) is not evenly distributed across the landscape. SARAs tend to be clustered in certain areas (e.g. around communities), meaning some locations face disproportionately higher risk. The strategic project areas identified within the North Division are designed to maximize risk reduction efficiency while also acknowledging limited resources for hazardous fuels reduction. The two graphics below demonstrate the efficiency of hazardous fuel reductions specifically within the North Division's WUI Interface and across the entirety of the Division.

WUI Interface



Full Division



Recommended Hazardous Fuels Reduction Options & Financial Estimates Table

The Vibrant Planet Platform evaluates a combination of seven different Hazardous Fuels Reduction options to determine the most efficient way to reduce risk for any given area on the landscape. The applicability of the Hazardous Fuels Reduction options are based on a series of operational constraints. Considerations such as vegetation type, steepness of slope, and other factors apply - based upon best Hazardous Fuels Reduction practices and considerations used by natural resource and land management agencies.

The following Hazardous Fuels Reduction types (summarized below) were recommended based on their efficiency in reducing risk in the Proposed Project Areas. Actual costs will be regionally variable and project dependent. Average cost estimates listed below are based on the recommended Hazardous Fuels Reduction portfolio.

Land Ownership Table

The table below summarizes land ownership/Hazardous Fuels Reduction across the North Division's Strategic Project Areas.

Ownership Type	Total Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Private Landowners	7,004 acres	35,367 acres
Federal Land	4 acres	2,041 acres
State Land	-	80 acres
Local Government	11 acres	-
Non-Governmental Organization	-	101 acres

Recommended Management Options & Financial Estimates

The following management types were recommended by the platform based on their efficiency in reducing risk in the Strategic Project Areas:

Management Type	Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Complex Mechanical Removal	831 acres	2,898 acres
Herbivory	1,679 acres	977 acres
Manual	1,309 acres	6,417 acres
Mechanical Rearrangement	207 acres	13,794 acres
Mechanical Removal	2,902 acres	12,638 acres
Rx Fire*	107 acres	864 acres
Total Proposed Project Area	**7,037 acres**	**37,591 acres**
Average Estimated Cost	**$2,400/acre**	**$2,570/acre**

*While the Vibrant Planet Platform recommends management types based on the highest likely efficiency in reducing risk, it also evaluates the feasibility of alternative management options that still will substantially reduce risk. See additional table and map below.

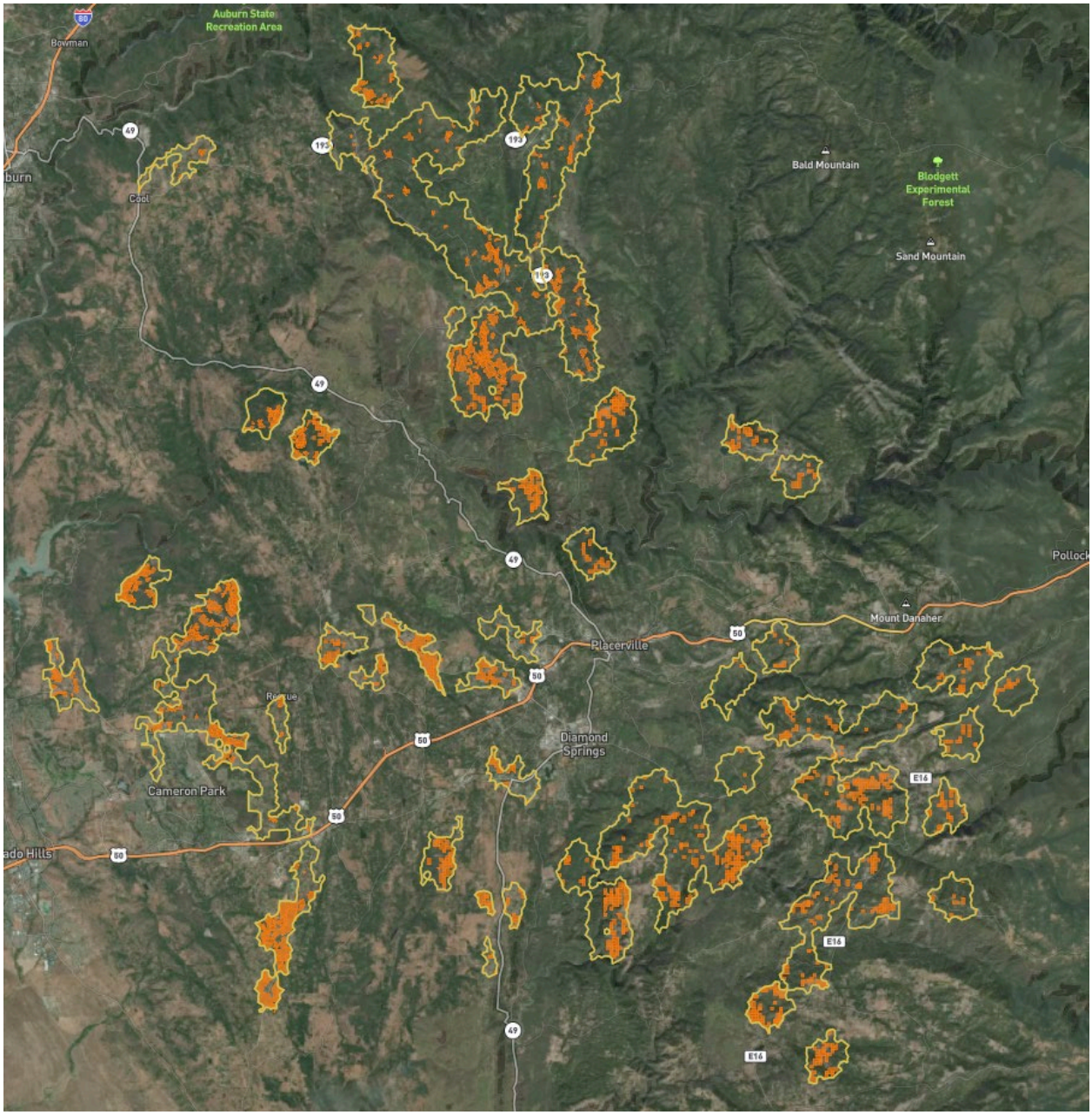
Project Cost Breakdown

The total cost to treat both project areas in our unit's fire plan is substantial, emphasizing the strategic investment required for effective wildfire resilience. As detailed in the provided table, the Wildland-Urban Interface (WUI) interface, encompassing **7,037 acres**, estimates treatments totaling **$16,868,800 at $2,400 per acre.** Meanwhile, the expansive Strategic Project Area determined for the North Division covering **37,591** acres necessitates **$96,676,670 for treatments at $2,570 per acre**, reflecting diverse management types such as manual, mechanical removal, and prescribed fire across varying acreages. These figures underscore the critical need for sufficient funding across divisions to implement these strategies effectively, as funding can be a significant challenge. Securing these resources is essential to enhancing community safety and reducing wildfire risks comprehensively

In the North Division Proposed Project Areas, prescribed fire is likely the most efficient hazardous fuels reduction option across **864 acres** and is a feasible alternative on an additional **7,065 acres**. In total, prescribed fire is a potential management option for risk reduction on **7,929** of **44,628** acres within the Division's Strategic Project Areas.

Management Type	**Acres in WUI Interface - Strategic Project Areas**	**Total Acres in Full Division - Strategic Project Areas**
Prescribed fire as a **primary management**	107 acres	**864 acres**
Prescribed fire as a **feasible alternative**	1,672 acres	**7,065 acres**

The area below visualizes the areas within our strategic planning areas that could benefit from prescribed fire. Highlighted in Orange.



Benefits to other At-Risk Values in Strategic Project Areas Table

While the North Division Assessment prioritized risk reduction for specific SARAs (see Values-At-Risk Emphasis discussion above), the hazardous fuel reduction projects within our Strategic Project Areas offer significant co-benefits that extend beyond targeted risk reduction. These projects enhance ecosystem health, improve air and water quality, safeguard critical infrastructure, and support wildlife habitats. The table below provides a summary of these co-benefits, illustrating how our strategic approach not only mitigates wildfire risk but also enhances overall environmental resilience and community well-being.

Objective Category	Area of Assessment	Strategic Project Areas	Predicted Risk Reduction
Water *Streams, Lakes, Areas of High Erosion*	WUI Interface	7,037 acres	3%
	Full Division	37,591 acres	5%

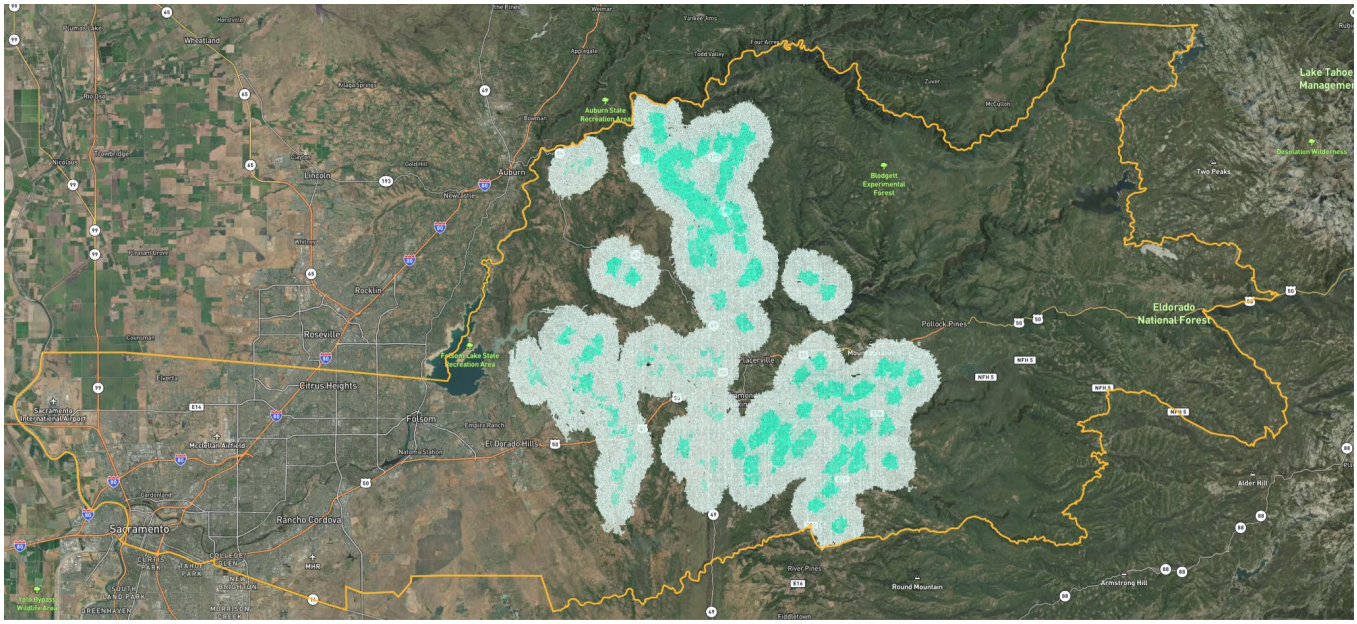
Objective Category	Area of Assessment	Strategic Project Areas	Predicted Risk Reduction
Recreation *Trails and Recreation Areas*	WUI Interface	7,037 acres	8%
	Full Division	37,591 acres	<1%
Wildlands & Forest Health *Mixed-Conifer Stand Density, Freshwater Wetlands, Riparian Areas, and Aboveground Live Biomass*	WUI Interface	7,037 acres	27%
	Full Division	37,591 acres	8%
Biodiversity *Suitable Beaver Habitat, California Black Oak, and Whitebark Pine*	WUI Interface	7,037 acres	26%
	Full Division	37,591 acres	8%
Ecological Commodity *Managed Timberlands*	WUI Interface	7,037 acres	<1%
	Full Division	37,591 acres	<1%

Predicted Hazard Reduction from Strategic Project Areas

If implemented, the Strategic Project Areas outlined in the WUI Interface and Full Division Assessments would reduce wildfire hazard across the landscape, especially within the Strategic Project Areas. The Table below summarizes this reduction.

Metric	Outcome Scale	% Change
Total Wildfire Hazard *Wildfire hazard is a combination of how likely an area is to burn and the intensity at which it burns. High hazard may reflect frequent fire, high flame lengths, or a combination of the two.*	Change to Strategic Project Area	-89%
	Change to Division	-9%

The map below visually represents the geographic change in wildfire hazard to both the Strategic Project Areas (turquoise color) and the influence outside of Strategic Project Areas (grey color).



Additional Predicted Outcomes from Strategic Project Areas

The following table summarizes the estimated change in hazard, and risk to value, across the North Division if/when the recommended hazardous fuel reduction actions (Hazardous Fuels Reductions) are implemented. These predicted outcomes include the combination of Division-wide and WUI Interface Strategic Project Areas.

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
Acres of WUI with Extreme Fire Behavior *Flame lengths >11' are considered extreme fire behavior and basically prevent most fire suppression efforts during a fire event.*	Change to Strategic Project Area	5,447 acres	33 acres	-99%
	Change to Division	22,428 acres	17,014 acres	-24%
The reduction in flame lengths –of the most extreme class– creates more opportunities for fire suppression activities during a wildfire incident.				
Number of Highly Exposed Structures *Hazardous fuel reduction efforts can shift structures from high exposure to lower exposure. Significantly reducing wildfire exposure to those structures could avoid as much as **$3.9 billion** in losses, based on an average rebuild cost of $300/sq ft and an average structure size of 1,500 sq ft.*	Change to Strategic Project Area	8,907	111	-99%
	Change to Division	43,454	34,599	-20%

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
Reducing wildfire exposure to structures, with adjacent hazardous fuel reduction, is a crucial step in reducing the wildfire risk to structures.				
Rate of Spread *Spread rate indicates how quickly a wildfire will grow.*	Change to Strategic Project Area	0.102 mph	0.029 mph	-72%
	Change to Division	0.141 mph	0.137 mph	-3%
A reduction in spread rate often increases fire suppression opportunities and corresponds to lower intensities and less wildfire risk.				
Source Acres of Ember Load to Buildings *Structures can be exposed to fires by embers from nearby wildland vegetation.*	Change to Strategic Project Area	36,427 acres	20,389 acres	-44%
	Change to Division	260,921 acres	244,884 acres	-6%
A reduction in the source of embers to nearby structures corresponds to a reduction in wildfire risk to structures.				
Expected Acres Burned within 10 Years *This metric indicates how many acres are expected to burn within 10 years.*	Change to Strategic Project Area	7,118 acres	6,135 acres	-14%
	Change to Division	75,896 acres	73,472 acres	-3%
Reducing the probability of a wildfire directly corresponds to a reduction in wildfire risk.				

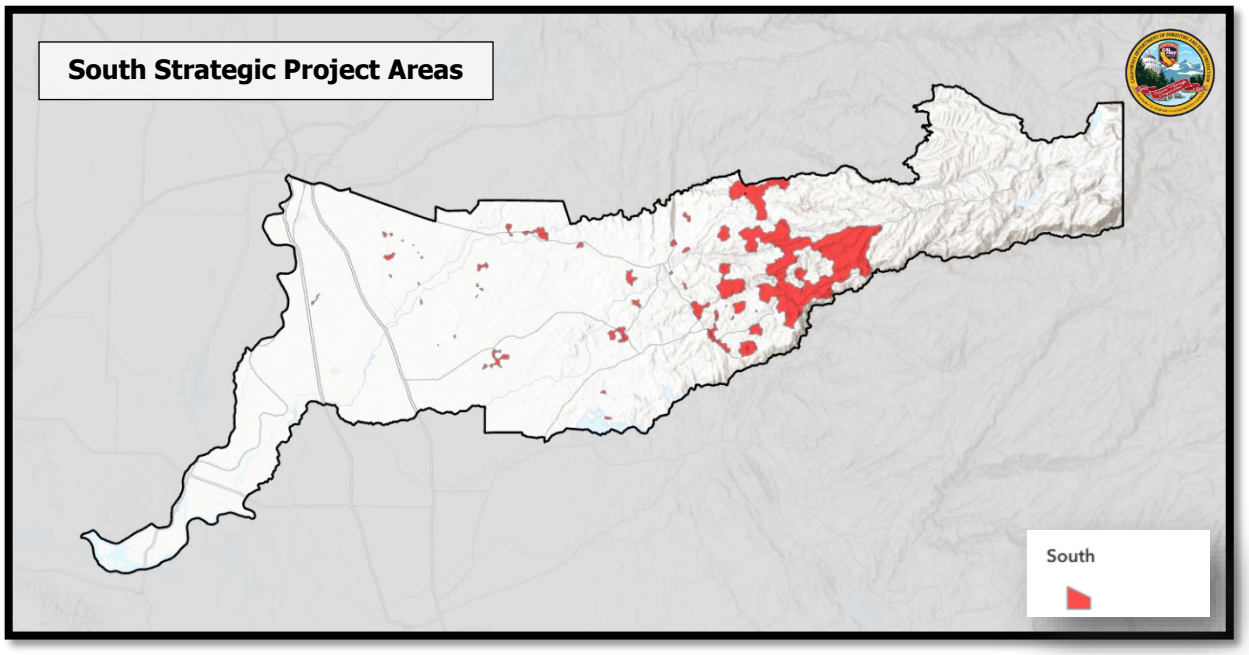
North Division AGOL Story Map
[Web-search: AGOL Story Map-AEU Strategic Fire Plan 2025]

South Division

The **South Division** of CAL FIRE's Amador-El Dorado Unit (AEU) encompasses approximately **932,000 acres** across Amador County and parts of surrounding jurisdictions. Although the population density is lower than in the North Division, many residents still live within wildland-urban interface (WUI) zones—where homes, ranches, and small subdivisions are interwoven with flammable vegetation and rugged terrain. Much of the existing development consists of older structures built prior to the adoption of modern WUI building standards, often with limited access routes, minimal defensible space, and proximity to fire-prone landscapes. These conditions heighten the risk to life and property during wildfire events.

Topographically, the South Division ranges from grassy foothills and oak woodlands in the west to densely forested ridgelines and timberlands in the east. This wide variation in vegetation types creates continuous, highly combustible fuel beds that are increasingly vulnerable during California's prolonged fire seasons. Though less developed than other parts of the Unit, the South Division faces similar challenges related to evacuation planning, fire suppression, and community preparedness. Sustained investment in fuels reduction, fire-safe infrastructure, and interagency cooperation is essential to improving wildfire resilience across this expansive and fire-prone landscape.

The South Division covers 445,743 acres of CAL FIRE Direct Protection Area. It contains CAL FIRE Battalions 3 and 4. The division contains a significant concentration of WUI-designated areas, with 20,013 acres classified as WUI Interface and 77,154 acres as WUI Intermix. It currently includes 23 subdivisions under the Subdivision Review Program and approximately 243,931 structures exceeding 400 square feet.

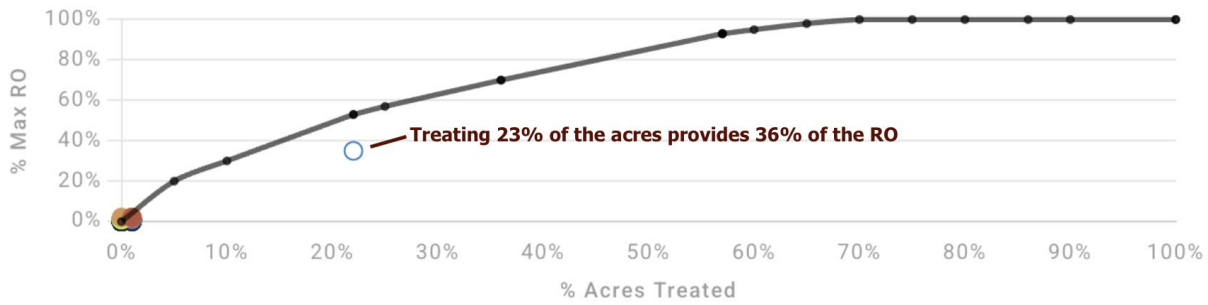


Assessment Table

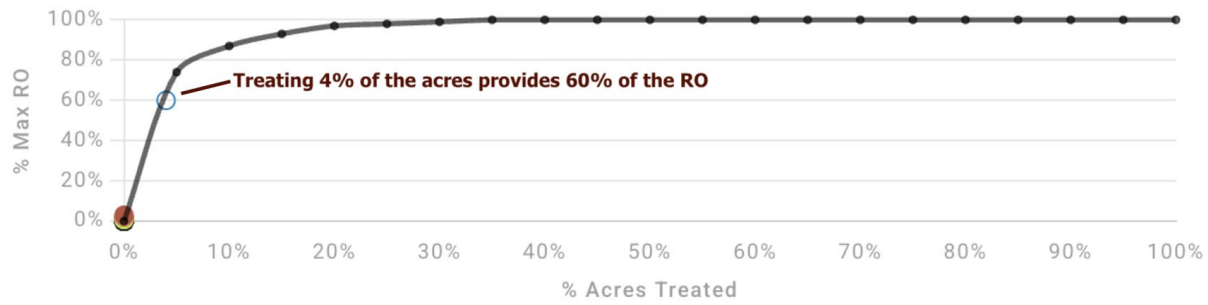
Area of Assessment	Total Acres	Strategic Project Areas	% of Assessment Area	Predicted Risk Reduction
WUI Interface	20,013 acres	4,504 acres	23%	36%
Full Division w/ emphasis on WUI Intermix + Subdivision Review	922,685 acres	37,441 acres	4%	60%
		Acres prioritized in both assessments		*209 acres*
		Total Proposed Project Areas		***41,736 acres***

Risk Reduction Efficiency Graphs

WUI Interface



Full Division



Land Ownership Table

Ownership Type	Total Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Private Landowners	4,467 acres	35,469 acres
Federal Land	9 acres	1,377 acres
State Land	-	235 acres
Local Government	27 acres	-
Non-Governmental Organization	-	358 acres

Management Type	Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Complex Mechanical Removal	609 acres	3,036 acres
Herbivory	2,555 acres	1,312 acres
Manual	489 acres	6,214 acres
Mechanical Rearrangement	139 acres	14,615 acres
Mechanical Removal	519 acres	10,242 acres
Rx Fire*	193 acres	2,022 acres
Total Proposed Project Area	4,504 acres	37,441 acres
Average Estimated Cost	$1,800/acre	$2,490/acre

*While the Vibrant Planet Platform recommends management types based on the highest likely efficiency in reducing risk, it also evaluates the feasibility of alternative management options that still will substantially reduce risk. See additional table and map below.

Project Cost Breakdown

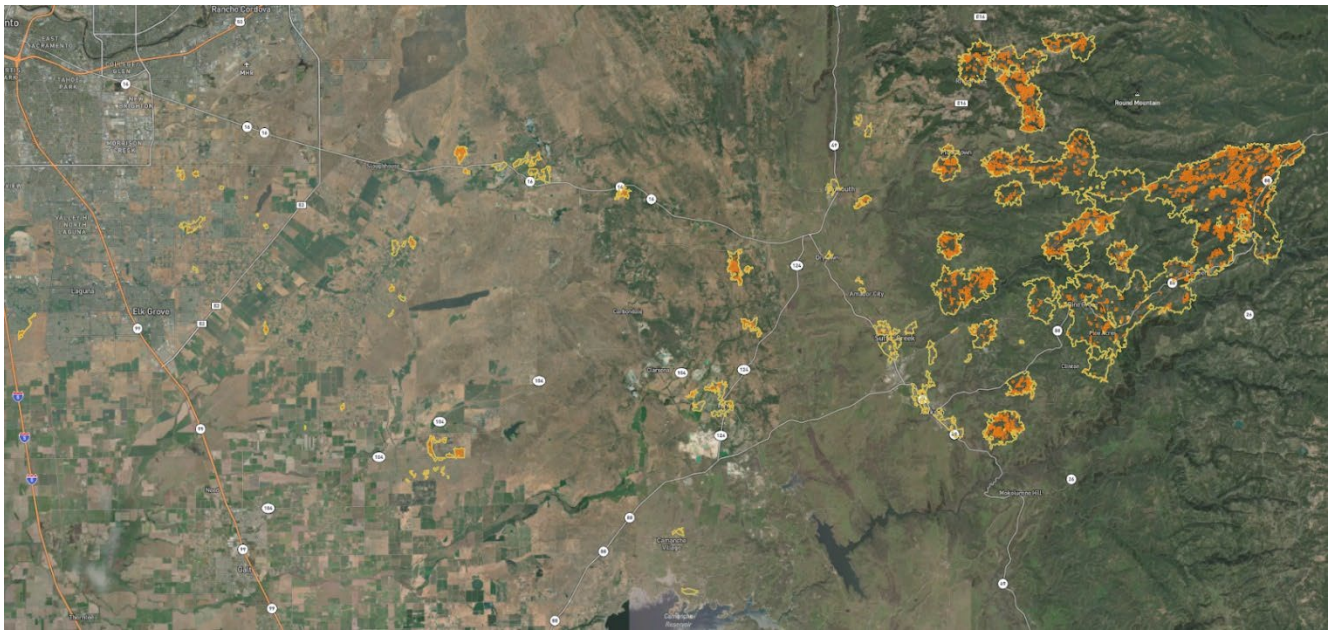
The total cost to treat both project areas in the South Division's fire plan highlights significant financial needs for effective wildfire resilience. Across the Wildland-Urban Interface (WUI) interface, covering **4,504 acres**, treatments are estimated to total **$8,107,200 at an average cost of $1,800 per acre.** Meanwhile, the expansive Strategic Project Area encompassing **37,441 acres requires $93,220,490 for treatments at $2,490 per acre.** This includes a range of management types such as manual labor, mechanical removal, and prescribed fire, varying in acreage and cost per acre.

Securing adequate funding remains a critical challenge to implement these strategies effectively, essential for enhancing community safety and mitigating wildfire risks comprehensively.

In the South Division Strategic Project Areas, prescribed fire is likely the most efficient hazardous fuels reduction option across 2,022 acres and is a feasible alternative on an additional 7,559 acres. In total, prescribed fire is a potential management option for risk reduction on 9,581 of 41,734 acres within the Division's Strategic Project Areas.

Management Type	Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Prescribed fire as a primary management	193 acres	2,022 acres
Prescribed fire as a feasible alternative	1,138 acres	7,559 acres

The area below visualizes the areas within our strategic planning areas that could benefit from prescribed fire. Highlighted in Orange.



Benefits to other At-Risk Values in Strategic Project Areas Table

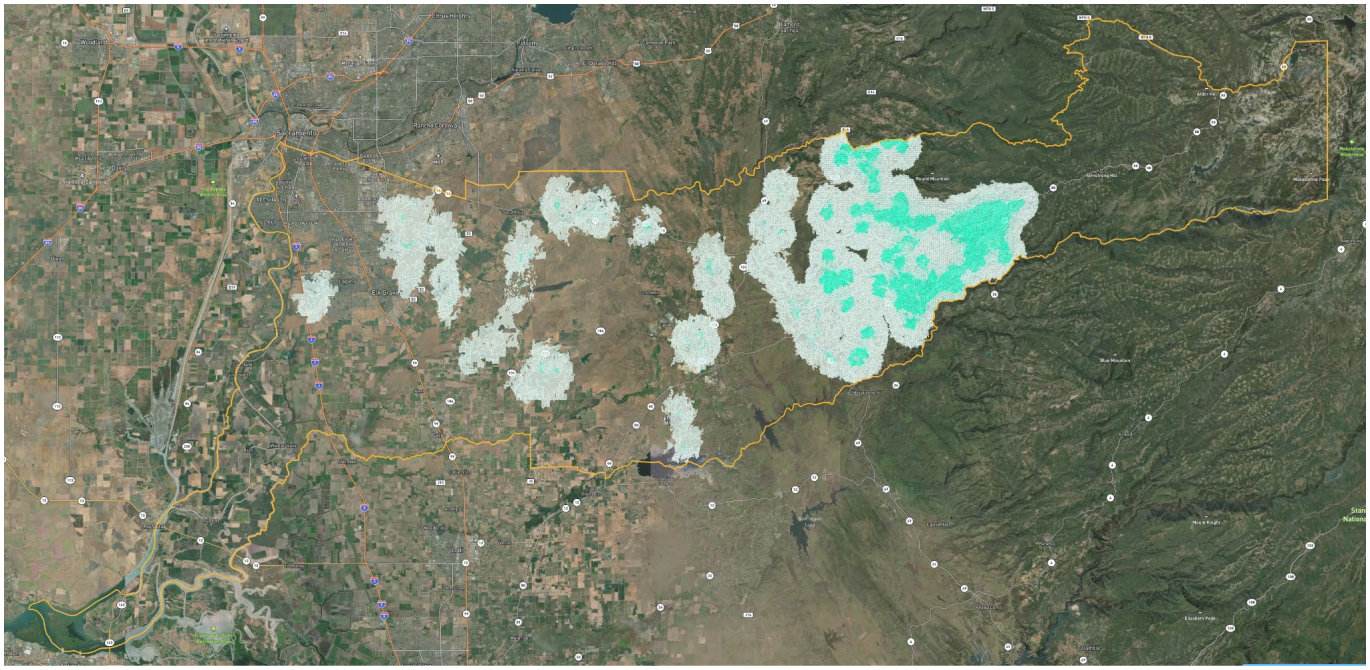
While the South Division Assessment prioritized risk reduction for specific SARAs (see Values-At-Risk Emphasis discussion above), the hazardous fuel reduction projects within our Strategic Project Areas offer significant co-benefits that extend beyond targeted risk reduction. These projects enhance ecosystem health, improve air and water quality, safeguard critical infrastructure, and support wildlife habitats. The table below provides a summary of these co-benefits, illustrating how our strategic approach not only mitigates wildfire risk but also enhances overall environmental resilience and community well-being.

Objective Category	Area of Assessment	Strategic Project Areas	Predicted Risk Reduction
Water *Streams, Lakes, Areas of High Erosion*	WUI Interface	4,504 acres	n/a
	Full Division	37,441 acres	7%
Recreation *Trails and Recreation Areas*	WUI Interface	4,504 acres	<1%
	Full Division	37,441 acres	1%
Wildlands & Forest Health *Mixed-Conifer Stand Density, Freshwater Wetlands, Riparian Areas, and Aboveground Live Biomass*	WUI Interface	4,504 acres	n/a
	Full Division	37,441 acres	9%
Biodiversity *Suitable Beaver Habitat, California Black Oak, and Whitebark Pine*	WUI Interface	4,504 acres	54%
	Full Division	37,441 acres	12%
Ecological Commodity *Managed Timberlands*	WUI Interface	4,504 acres	n/a
	Full Division	37,441 acres	<1%

Predicted Hazard Reduction from Strategic Project Areas Table & Map

Metric	Outcome Scale	% Change
Total Wildfire Hazard *Wildfire hazard is a combination of how likely an area is to burn and the intensity at which it burns. High hazard may reflect frequent fire, high flame lengths, or a combination of the two.*	Change to Strategic Project Area	-88%
	Change to Division	-10%

The map below visually represents the geographic change in wildfire hazard to both the Strategic Project Areas (turquoise color) and the influence outside of Strategic Project Areas (grey color).



Additional Predicted Outcomes from Strategic Project Areas Table

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
Acres of WUI with Extreme Fire Behavior *Flame lengths >11' are considered extreme fire behavior and basically prevent most fire suppression efforts during a fire event.*	Change to Strategic Project Area	3,874 acres	59 acres	-98%
	Change to Division	6,669 acres	2,854 acres	-57%
The reduction in flame lengths –of the most extreme class– creates more opportunities for fire suppression activities during a wildfire incident.				
Number of Highly Exposed Structures *Hazardous Fuels Reduction efforts can shift structures from high exposure to lower exposure. Significantly reducing wildfire exposure to those structures could avoid as much as **$3.8 billion** in losses, based on an average rebuild cost of $300/sq ft and an average structure size of 1,500 sq ft.*	Change to Strategic Project Area	8,700	218	-97%
	Change to Division	15,542	7,030	-55%
Reducing wildfire exposure to structures, with adjacent hazardous fuel reduction, is a crucial step in reducing the wildfire risk to structures.				

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
Rate of Spread *Spread rate indicates how quickly a wildfire will grow.*	Change to Strategic Project Area	0.084 mph	0.027 mph	-68%
	Change to Division	0.170 mph	0.167 mph	-2%
A reduction in spread rate often increases fire suppression opportunities and corresponds to lower intensities and less wildfire risk.				
Source Acres of Ember Load to Buildings *Structures can be exposed to fires by embers from nearby wildland vegetation.*	Change to Strategic Project Area	30,759 acres	16,334 acres	-47%
	Change to Division	174,558 acres	160,133 acres	-8%
A reduction in the source of embers to nearby structures corresponds to a reduction in wildfire risk to structures.				
Expected Acres Burned within 10 Years *This metric indicates how many acres are expected to burn within 10 years.*	Change to Strategic Project Area	6,396 acres	5,021 acres	-21%
	Change to Division	64,151 acres	61,790 acres	-4%
Reducing the probability of a wildfire directly corresponds to a reduction in wildfire risk				

South Division AGOL Story Map
[Web-search: AGOL Story Map-AEU Strategic Fire Plan 2025]

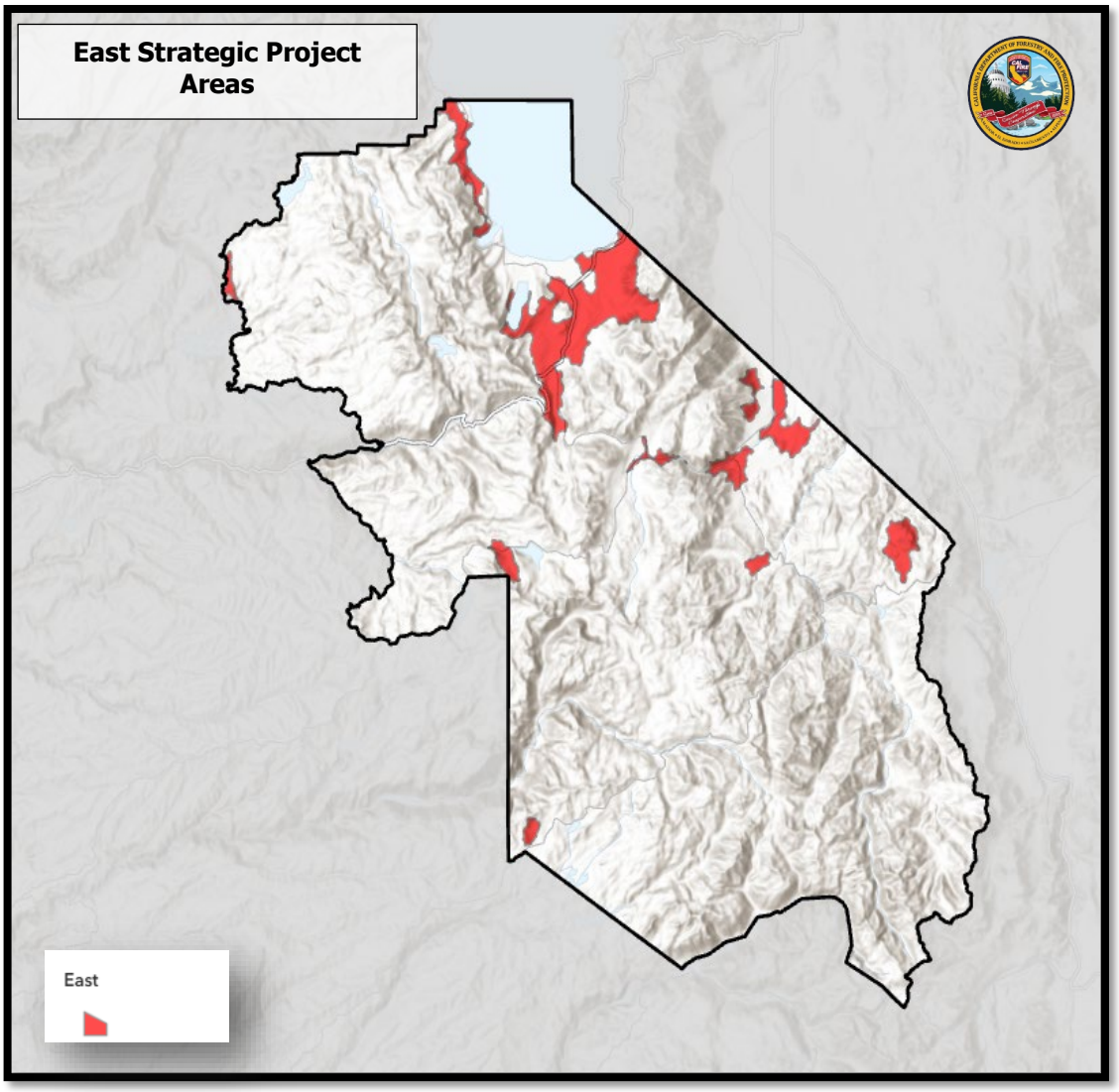
East Division

The **East Division** of CAL FIRE's Amador-El Dorado Unit (AEU) covers approximately **790,000 acres** across Alpine County and the eastern portions of El Dorado County, including the Lake Tahoe Basin. This vast region includes a diverse mix of communities—from sparsely populated rural areas like Markleeville and Woodfords in Alpine County to higher-density population centers like the City of South Lake Tahoe and surrounding neighborhoods. The region's population fluctuates seasonally due to tourism, and its built environment ranges from isolated cabins and legacy homes to compact subdivisions nestled within dense conifer forests. These variations create a complex wildfire risk profile, particularly where development interfaces with steep terrain and heavy fuels.

The East Division's high-elevation landscape is dominated by timbered slopes, Jeffrey pine, mixed conifer stands, and East Side chaparral and sagebrush—all of which are highly flammable during dry summer months. Despite the differences in density and access across the region, both rural and urbanized areas face critical wildfire vulnerabilities.

Coordinated fire preparedness efforts, such as defensible space compliance, vegetation management, and participation in **Fire Adapted Community** programs, are vital. CAL FIRE continues to collaborate with local, state, and federal partners—especially within the complex jurisdictional mosaic of the Lake Tahoe Basin—to enhance wildfire resiliency across the East Division to withstand future fire events.

The East Division covers 37,105 acres of CAL FIRE Direct Protection Area and is the smallest division in the Amador-El Dorado Unit. It comprises CAL FIRE Battalion 6. The WUI-designated areas contain 6,216 acres classified as WUI Interface and 14,881 acres as WUI Intermix. The division currently includes 24 subdivisions under the Subdivision Review Program and approximately 23,174 structures exceeding 400 square feet.

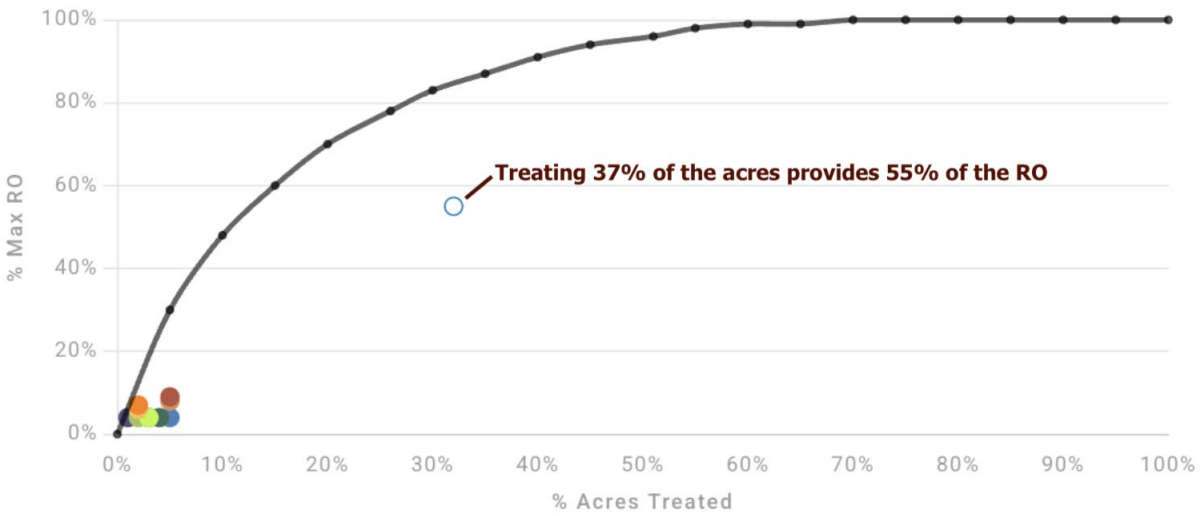


Assessment Table

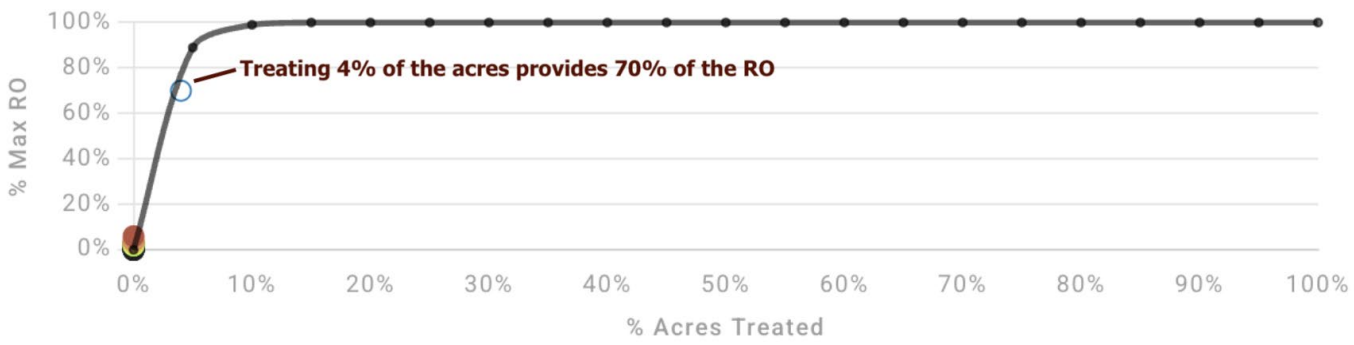
Area of Assessment	Total Acres	Strategic Project Areas	% of Assessment Area	Predicted Risk Reduction
WUI Interface	6,216 acres	2,274 acres	37%	55%
Full Division w/ emphasis on WUI Intermix + Subdivision Review	745,646 acres	27,759 acres	4%	70%
		Acres prioritized in both assessments		*1,871 acres*
		Total Proposed Project Areas		**28,162 acres**

Risk Reduction Efficiency Graphs

WUI Interface



Full Division



Land Ownership Table

Ownership Type	Total Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Private Landowners	1,884 acres	12,290 acres
Federal Land	119 acres	12,634 acres
American Indian Lands	-	75 acres
State Land	266 acres	2,332 acres
Local Government	-	340 acres
Non-Governmental Organization	6 acres	90 acres

*****While the Vibrant Planet Platform recommends management types based on the highest likely efficiency in reducing risk, it also evaluates the feasibility of alternative management options that still will substantially reduce risk. See additional table and map below.

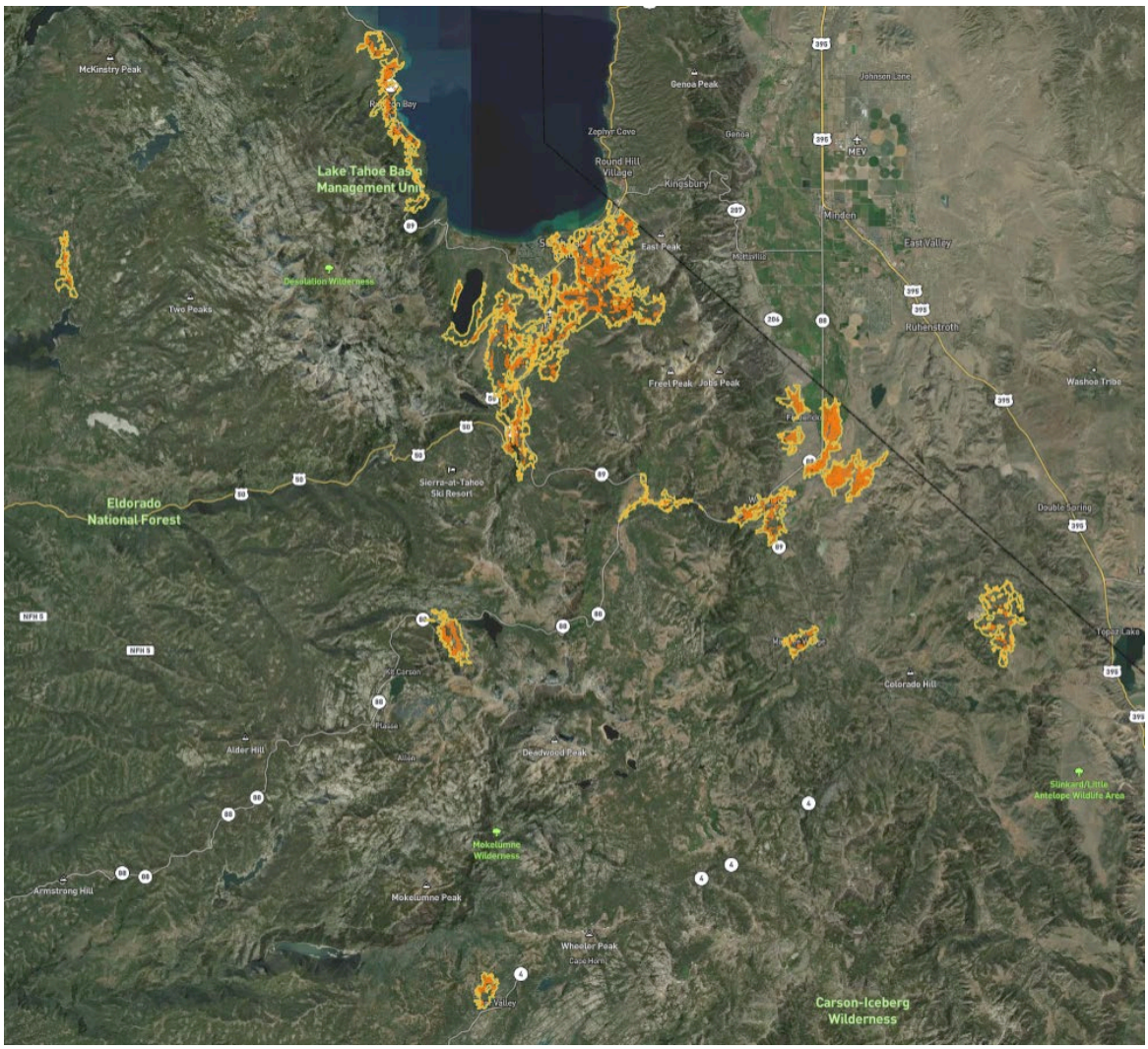
Project Cost Breakdown

The East Division's wildfire resilience strategy requires significant financial resources to address the treatment needs across its project areas. Within the Wildland-Urban Interface (WUI) interface, covering **2,274 acres**, treatments are estimated at **$6,400,800, with an average cost of $2,820 per acre.** In the broader **Strategic Project Area encompassing 27,759 acres, the total cost for treatments is projected to be $56,832,450, at an average cost of $2,050 per acre**. These estimates reflect various management approaches, including manual labor, mechanical removal, and prescribed fire, tailored to the specific needs and challenges of the division. Securing adequate funding is crucial to effectively implement these strategies, ensuring enhanced community safety and reduced wildfire risks throughout the East Division.

In the East Division Strategic Project Areas, prescribed fire is likely the most efficient hazardous fuels reduction option across 5,380 acres and is a feasible alternative on an additional 5,237 acres. In total, prescribed fire is a potential management option for risk reduction on 10,617 of 28,165 acres within the Division’s Strategic Project Areas.

Management Type	Acres in WUI Interface - Strategic Project Areas	Total Acres in Full Division - Strategic Project Areas
Prescribed fire as a primary management	191 acres	5,380 acres
Prescribed fire as a feasible alternative	335 acres	5,237 acres

The area below visualizes the areas within our strategic planning areas that could benefit from prescribed fire. Highlighted in Orange.



Benefits to other At-Risk Values in Strategic Project Areas Table

While the East Division Assessment prioritized risk reduction for specific SARAs (see Values-At-Risk Emphasis discussion above), the hazardous fuel reduction projects within our Strategic Project Areas offer significant co-benefits that extend beyond targeted risk reduction.

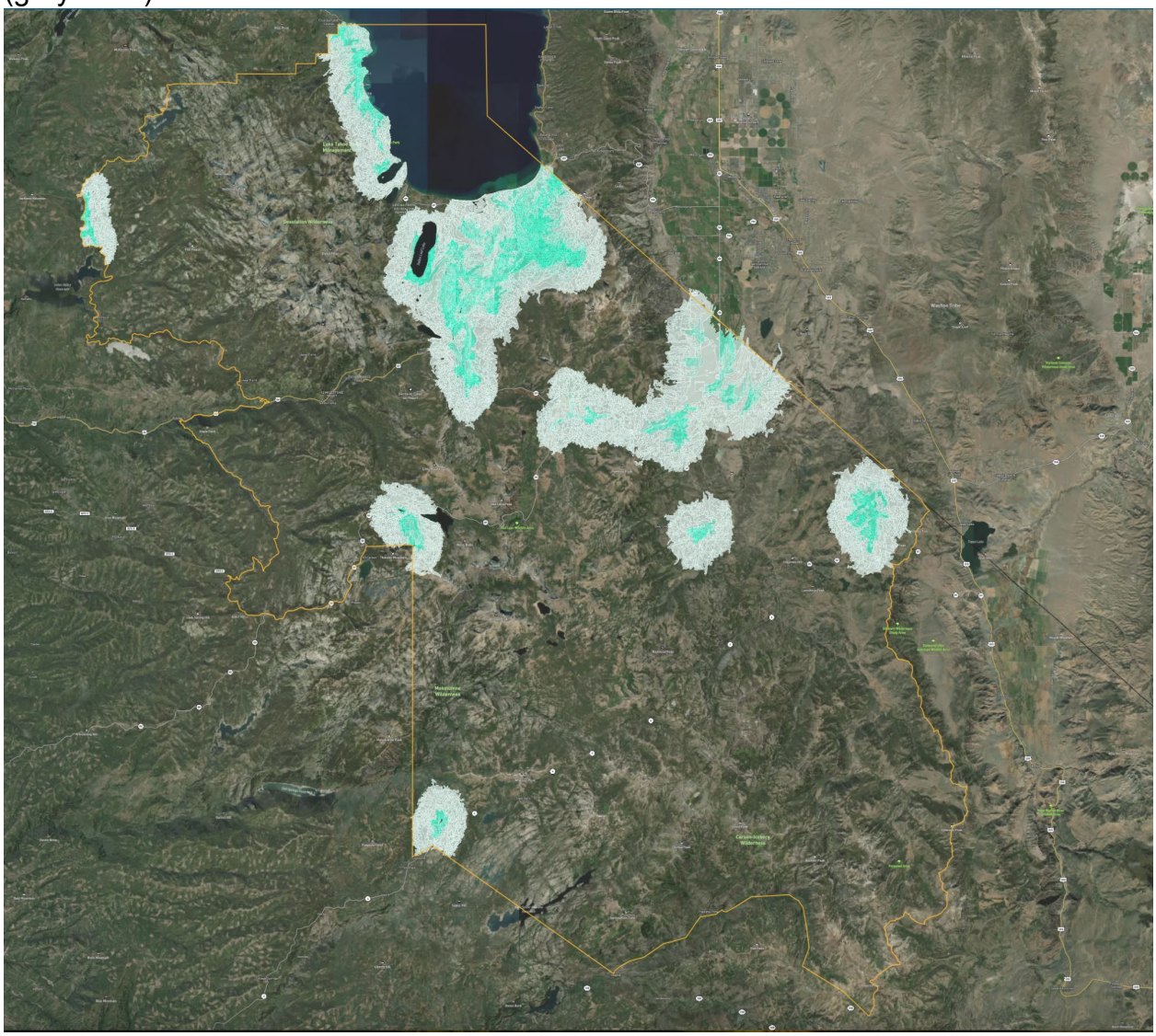
These projects enhance ecosystem health, improve air and water quality, safeguard critical infrastructure, and support wildlife habitats. The table below provides a summary of these co-benefits, illustrating how our strategic approach not only mitigates wildfire risk but also enhances overall environmental resilience and community well-being.

Objective Category	Area of Assessment	Strategic Project Areas	Predicted Risk Reduction
Water *Streams, Lakes, Areas of High Erosion*	WUI Interface	2,274 acres	32%
	Full Division	27,759 acres	3%
Recreation *Trails and Recreation Areas*	WUI Interface	2,274 acres	84%
	Full Division	27,759 acres	7%
Wildlands & Forest Health *Mixed-Conifer Stand Density, Freshwater Wetlands, Riparian Areas, and Aboveground Live Biomass*	WUI Interface	2,274 acres	10%
	Full Division	27,759 acres	6%
Biodiversity *Suitable Beaver Habitat, California Black Oak, and Whitebark Pine*	WUI Interface	2,274 acres	20%
	Full Division	27,759 acres	8%
Ecological Commodity *Managed Timberlands*	WUI Interface	2,274 acres	n/a
	Full Division	27,759 acres	2%

Predicted Hazard Reduction from Strategic Project Areas Table & Map

Metric	Outcome Scale	% Change
Total Wildfire Hazard *Wildfire hazard is a combination of how likely an area is to burn and the intensity at which it burns. High hazard may reflect frequent fire, high flame lengths, or a combination of the two.*	Change to Strategic Project Area	-69%
	Change to Division	-4%

The map below visually represents the geographic change in wildfire hazard to both the Strategic Project Areas (turquoise color) and the influence outside of Strategic Project areas (grey color).



Additional Predicted Outcomes from Strategic Project Areas Table

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
Acres of WUI with Extreme Fire Behavior *Flame lengths >11' are considered extreme fire behavior and basically prevent most fire suppression efforts during a fire event.*	Change to Strategic Project Area	1,091 acres	115 acres	-89%
	Change to Division	1,454 acres	479 acres	-67%
The reduction in flame lengths –of the most extreme class– creates more opportunities for fire suppression activities during a wildfire incident.				
Number of Highly Exposed Structures *Hazardous Fuels Reduction efforts can shift structures from high exposure to lower exposure. Significantly reducing wildfire exposure to those structures could avoid as much as $1.4 Billion in losses, based on an average rebuild cost of $300/sq ft and an average structure size of 1,500 sq ft.*	Change to Strategic Project Area	3,270	186	-94%
	Change to Division	4,103	1,008	-75%
Reducing wildfire exposure to structures, with adjacent hazardous fuel reduction, is a crucial step in reducing the wildfire risk to structures.				
Rate of Spread *Spread rate indicates how quickly a wildfire will grow.*	Change to Strategic Project Area	0.169 mph	0.080 mph	-53%
	Change to Division	0.212 mph	0.209 mph	-1%
A reduction in spread rate often increases fire suppression opportunities and corresponds to lower intensities and less wildfire risk.				
Source Acres of Ember Load to Buildings *Structures can be exposed to fires by embers from nearby wildland vegetation.*	Change to Strategic Project Area	11,426 acres	6,885 acres	-40%
	Change to Division	28,425 acres	23,884 acres	-16%
A reduction in the source of embers to nearby structures corresponds to a reduction in wildfire risk to structures.				
Expected Acres Burned within 10 Years	Change to Strategic Project Area	1,162 acres	1,004 acres	-14%

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
This metric indicates how many acres are expected to burn within 10 years.	Change to Division	23,637 acres	23,278 acres	-2%
Reducing the probability of a wildfire directly corresponds to a reduction in wildfire risk.				

East Division AGOL Story Map
[Web-search: AGOL Story Map-AEU Strategic Fire Plan 2025]

Unit Divisional Project Area Totals

In reviewing the outcomes across our unit's divisions, the strategic project areas underscore significant efforts and investment in wildfire resilience. Below is a brief overview of the total picture of large landscape project areas focused on protecting communities.

Metrics Overview:

- **Total Unit Strategic Project Areas Acreage:**
  - North Division: 37,591 acres
  - South Division: 37,441 acres
  - East Division: 27,759 acres
  - **Total Unit Strategic Project Areas Acreage:** 110,828 acres

- **Prescribed Fire Acres in the Unit:**
  - North Division: 864 acres
  - South Division: 193 acres
  - East Division: 191 acres
  - **Total Prescribed Fire Acres in the Unit:** 1,355 acres

- **Total Cost to Treat All Acres:**
  - North Division: $96,676,670
  - South Division: $101,327,690
  - East Division: $62,233,250
  - **Total Cost to Treat All Acres in the Unit:** $277,106,410

Critical Access Routes Strategic Project Areas

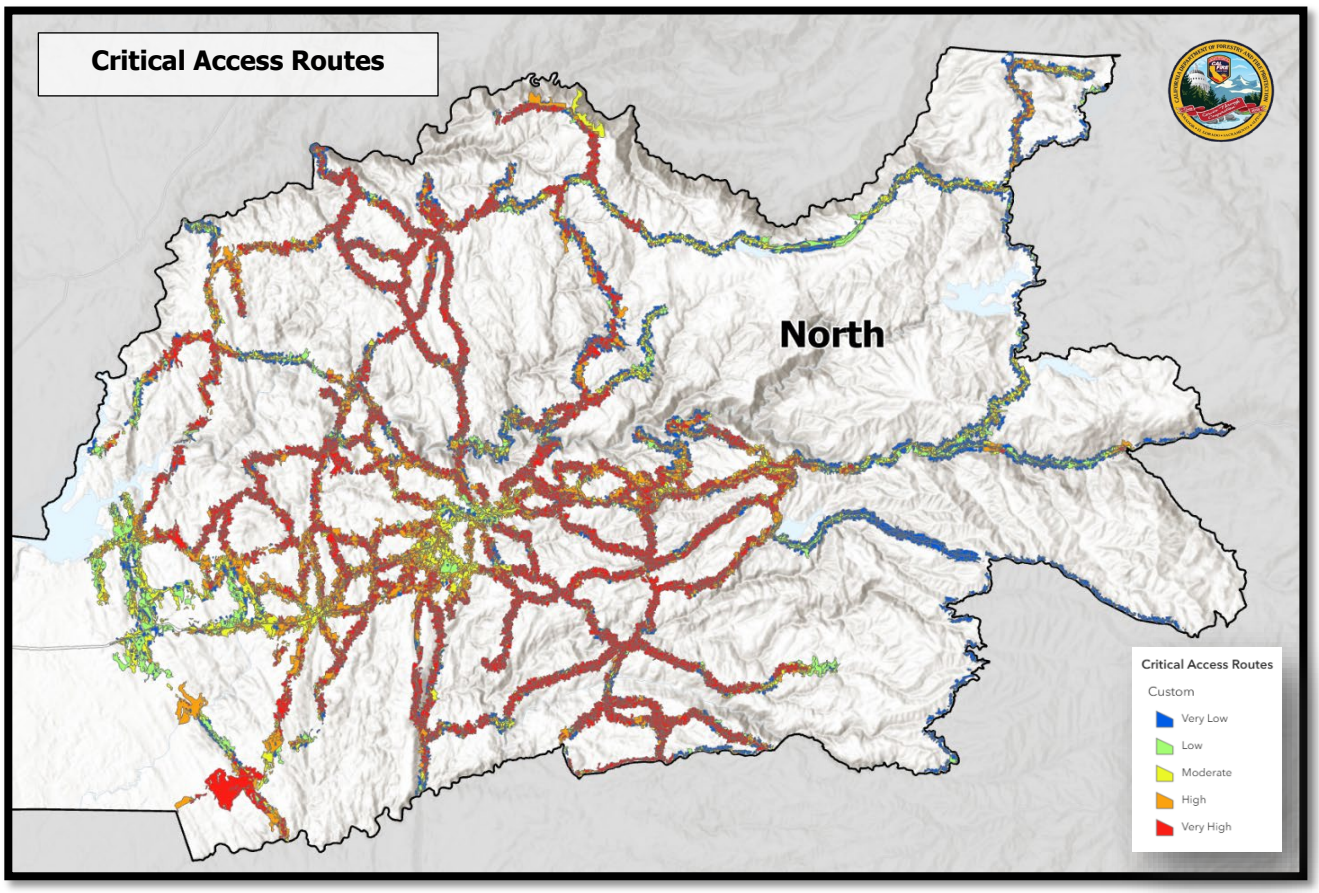
Across the North, South, and East Divisions of CAL FIRE's Amador-El Dorado Unit, **Critical Access Routes** have been identified as essential roadways for wildfire response and public safety. These roads and highways are vital for resident evacuation and emergency responder access during a wildfire. Ensuring they remain open and passable during a wildfire can be the difference between a well-executed evacuation and dangerous congestion. Routes serve residential communities, including essential services like hospitals, schools, and emergency shelters, especially in rural areas where alternate paths are limited or nonexistent.

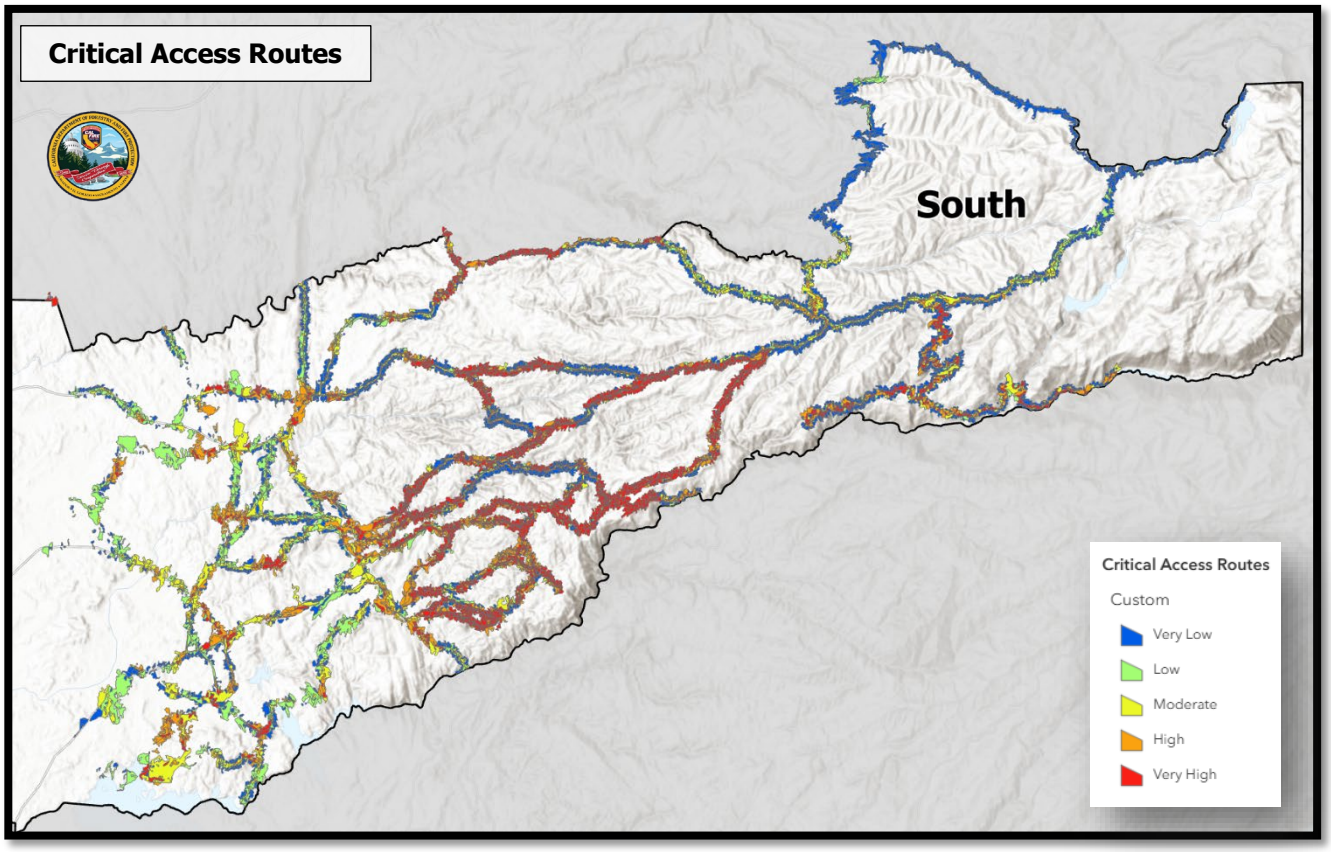
Clearing flammable vegetation along these critical access routes not only supports safe evacuation and response but also creates a valuable **defensible corridor** for fire operations. In many cases, these roads can serve as **pre-established control lines**, allowing firefighting resources to anchor suppression efforts, establish perimeters, or safely conduct backfiring operations during an advancing wildfire.

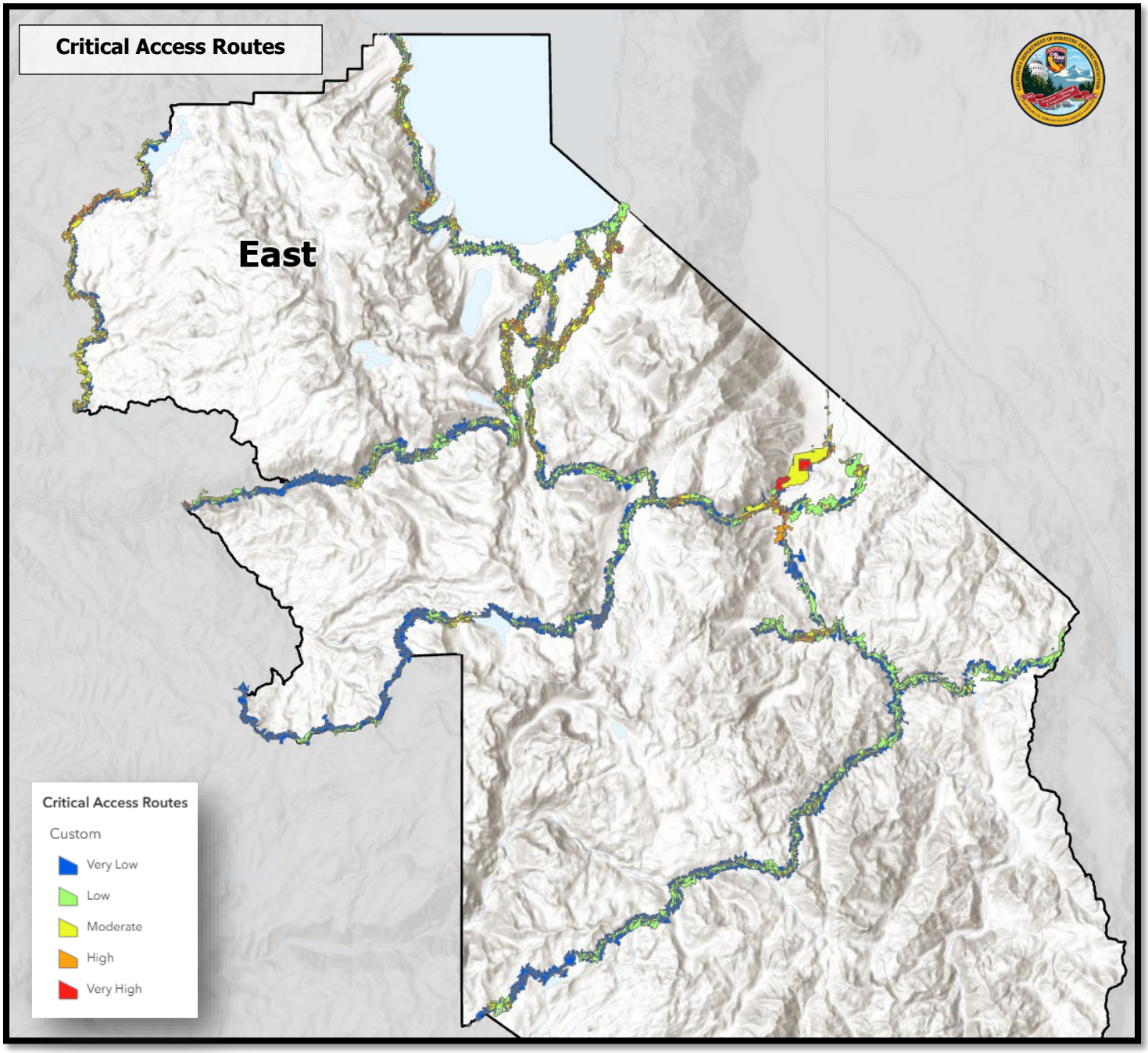
The Critical Access Routes Assessment goals are to reduce the greatest amount of risk to Critical Access Routes and other Safety values-at-risk (see 'Values-at-Risk' discussion above) with the most efficient hazardous fuel reduction actions (see 'Hazardous Fuels Reduction Targets' discussion above).

The full extent area was analyzed for risk reduction efficiency. The top 20% of values were identified as Strategic Project Areas in the table below:

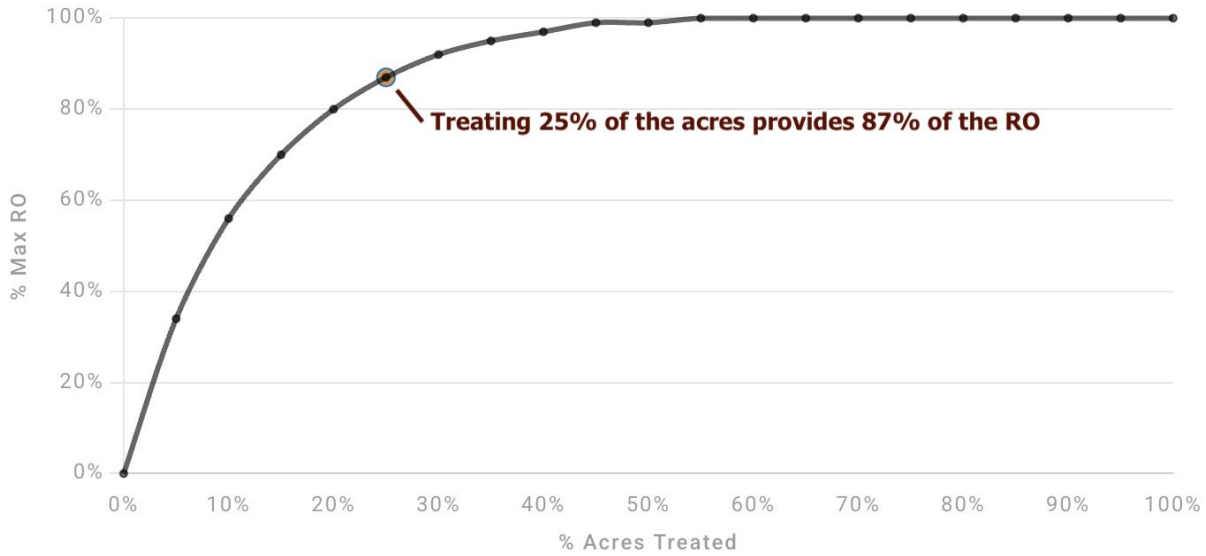
Area of Assessment	Total Acres	Strategic Project Areas	% of Assessment Area	Predicted Risk Reduction
Critical Access Routes	264,521 acres	67,911 acres	25%	87%


Critical Access Routes
North
Critical Access Routes
Custom
Very Low
Low
Moderate
High
Very High


Critical Access Routes
South
Critical Access Routes
Custom
Very Low
Low
Moderate
High
Very High


Critical Access Routes
East
Critical Access Routes
Custom
Very Low
Low
Moderate
High
Very High

Risk Reduction Efficiency Graphs



Predicted Hazard Reduction from Proposed Project Areas Table

Metric	Outcome Scale	% Change
Total Wildfire Hazard *Wildfire hazard is a combination of how likely an area is to burn and the intensity at which it burns. High hazard may reflect frequent fire, high flame lengths, or a combination of the two.*	Change to Strategic Project Area	-84%
	Change to All Critical Access Routes	-30%
	Change to Full Unit	-6%

Additional Predicted Outcomes from Proposed Project Areas Table

Metric	Area of Assessment	Pre-Treatment	Post-Treatment	% Change
Acres that Threaten Critical Access Routes *Fire behavior near roads, especially during extreme fire events, can affect the use of Critical Access Routes for access and evacuation. This metric identifies how many acres in the assessment area may impact these roads during a fire event.*	Change to Strategic Project Area	2,742 acres	393 acres	-86%
	Change to All Critical Access Routes	11,272 acres	8,923 acres	-21%
	Change to Full Unit	11,447 acres	9,097 acres	-21%

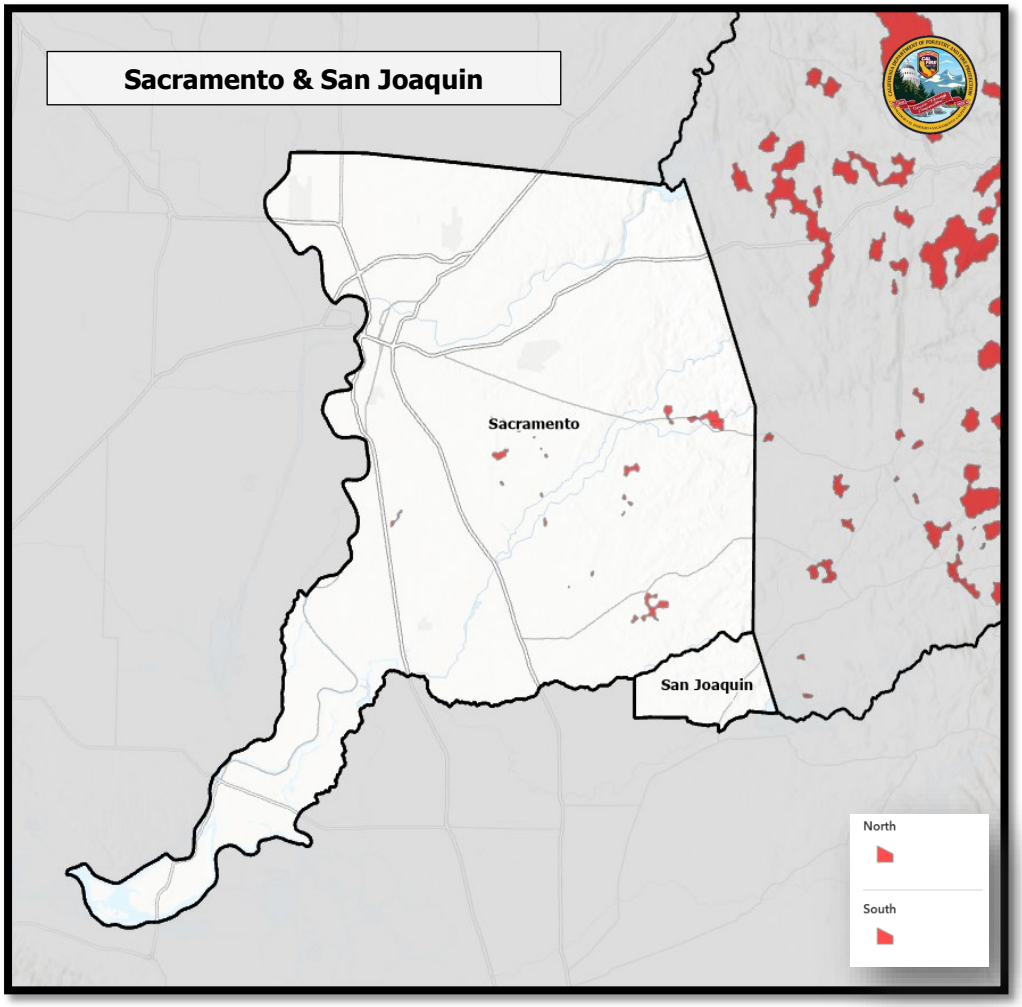
Critical Access Routes AGOL Story Map

[Web-search: AGOL Story Map-AEU Strategic Fire Plan 2025]

Sacramento and San Joaquin Counties

CAL FIRE's Amador-El Dorado Unit (AEU) maintains Direct Protection Area (DPA) responsibilities over **113,574 acres in Sacramento County** and **24,877 acres in San Joaquin County**. These areas are primarily on the eastern side of each county, where rural ranch properties, grasslands, and scattered subdivisions border more densely populated regions.

While less forested than the Sierra foothills, these zones remain highly vulnerable to fast-moving grass and brush fires, especially during dry conditions and southwest wind events. Fires that ignite in these counties can quickly escalate and move upslope into the North or South Division Planning Areas, posing a serious threat to foothill and mountain communities. Maintaining wildfire readiness, defensible space and fuel modification in these transition areas are critical to the overall fire resilience of the Unit.



APPENDIX A: CURRENT PRE-FIRE PROJECTS

Below is a list and description of ongoing pre-fire projects within the unit. These projects have successfully completed environmental reviews and are currently being worked on by crews. These projects will continue to be worked on as part of our long-term wildfire prevention efforts.

PRE-FIRE PROJECTS

Amador-El Dorado Unit (AEU)

01/01/2024 through 12/31/2024

Amador-El Dorado Unit (AEU)

PROGRAM	PROJECT NAME	Status	Treatment Footprint Acres	Unit
VMP	**2017 Sly Park VMP**	Active	**1,458.65**	AEU
Fire Plan	**2020 Forestry Challenge**	Complete		AEU
Fire Plan	**2023 Eastern Alpine Communities Hazardous Fuels Reduction Project**	Active	**62.93**	AEU
Fire Plan	**23-SLT-Community Chipping**	Active	**0.99**	AEU
Fire Plan	**2CA05282 Amador RCD**	Active	**71.01**	AEU
Fire Plan	**5GA21119 Amador County Collaborative Ingress, Egress and Education Phase 2**	Active	**371.62**	AEU
Fire Plan	**5GA21129 Georgetown Marshall Road Fuels Reduction Project**	Active	**30.08**	AEU
Fire Plan	**5GA21149 Upper Rancheria Community Fuel Break**	Active	**61.87**	AEU
Fire Plan	**5GA21150 - FA50 Phase I, Sly Park**	Active	**403.65**	AEU
Fire Plan	**5GG17108 Fire Adapted 50 PHII - El Dorado Cooperative Wildland Fire Prevention Strategy**	Active	**954.16**	AEU
Fire Plan	**5GG21101 - Amador County Evacuation Route Improvement Program**	Active		AEU
Fire Plan	**5GG21199 South El Dorado County Fuel Reduction**	Active	**0.54**	AEU
Fire Plan	**5GG21200 Fuel Reduction for Critical Roads**	Active	**62.75**	AEU
Fire Plan	**5GG21201 Amador Community Fuel Break Development Project**	Active	**55.11**	AEU

Fire Plan	**5GG21203 - Turtle Rock Park Biomass Collection Site**	Active	**28,818.19**	AEU
Fire Plan	**Amador Community Chipping Project**	Active		AEU
Fire Plan	**Amador County Collaborative Ingress, Egress and Education Plan**	Active	**902.02**	AEU
Fire Plan	**Amador County Roads SRA**	Active	**255.28**	AEU
VMP	**Amoruso VMP**	Active	**909.24**	AEU
Forest Health	**ARC SOFAR Restoration Project**	Active	**1,029.82**	AEU
Fire Plan	**Arroyo Seco VMP**	Active	**1,822.85**	AEU
VMP	**Auburn Lake Trails 2016**	Active	**56.87**	AEU
CFIP	**Barentson CFIP 2021**	Complete	**102.69**	AEU
Forest Health	**Calforests Caldor Fire Post Fire Recovery – Phase I**	Active	**7,053.17**	AEU
Forest Health	**California State Parks Forest Health**	Active	**1,529.05**	AEU
Fire Plan	**California Tahoe Conservancy**	Active	**61.58**	AEU
Fire Plan	**CFTC-Ione FR**	Active	**17.24**	AEU
Fire Plan	**Communication Repeater Fuels Maintenance**	Active	**4.20**	AEU
Forest Health	**Cosumnes Ladder Fuel Reduction Project**	Active	**1,630.54**	AEU
CFIP	**Dauphinais CFIP 2023**	Cancelled	**56.31**	AEU
Fire Plan	**Dew Drop Station FR**	Active	**10.52**	AEU
VMP	**Doaks Ridge VMP 2016**	Active	**110.89**	AEU
Fire Plan	**Eastern Alpine Communities Fuels Mitigation Project**	Active	**130.26**	AEU
Fire Plan	**EDCFSC Residential Hazard Tree Removal Project**	Active	**582.13**	AEU
Fire Plan	**El Dorado Canal Fuel Break Project**	Active	**198.44**	AEU
Fire Plan	**El Dorado Chipper**	Active		AEU
Fire Plan	**El Dorado County Hazardous Fuels Reduction**	Active	**462.34**	AEU
Fire Plan	**El Dorado County SRA Roads**	Active	**319.83**	AEU
Fire Plan	**El Dorado Resource Conservation District (RCD)**	Planned		AEU
Forest Health	**Fire Adapted 50 Phase IB - Wildland Fire Protection Program**	Active	**1,642.21**	AEU
Fire Plan	**Fire Safe on the Divide**	Active	**230.19**	AEU
Forest Health	**Forest Projects Plan - Arbor (Phase 1A)**	Active	**3,131.76**	AEU
Forest Health	**Forest Projects Plan (Phase I)**	Active	**2,254.94**	AEU
VMP	**Georgetown Divide Complex 2015 VMP**	Active	**2,246.17**	AEU
CFIP	**Harrell CFIP 2024**	Active	**107.17**	AEU
Fire Plan	**Indian Grinding Rock State Park**	Active	**17.42**	AEU
Forest Health	**Jackson Creek Forest and Watershed Health Project**	Active	**1,217.90**	AEU

CFIP	**James CFIP 2022**	Complete	**53.47**	AEU
VMP	**Ladies Valley 2014 VMP**	Active	**25.13**	AEU
Forest Health	**Leoni Meadows Forest Restoration Project**	Active	**2,011.18**	AEU
VMP	**Lyon VMP**	Active	**335.34**	AEU
Fire Plan	**Pine Acres Fuel Break Maintenance**	Active	**189.51**	AEU
VMP	**Pine Acres VMP**	Active	**597.80**	AEU
Fire Plan	**Pine Hill BLM**	Active	**60.69**	AEU
VMP	**Prairie City VMP 2016**	Active		AEU
VMP	**Sacramento Valley Conservancy 2020 VMP**	Active	**1,207.86**	AEU
CFIP	**Seven Storey CFIP 2023**	Active	**71.12**	AEU
VMP	**Shake / Omo VMP 2019**	Active	**434.48**	AEU
VMP	**Shake/Fiddletown 2017**	Active	**294.70**	AEU
Fire Plan	**Shay Creek FR**	Active	**2.38**	AEU
CFIP	**Sherrill CFIP 2023**	Active	**187.51**	AEU
Forest Health	**Spanish Flat North: Phase III Chili Bar to Georgetown Fuel Reduction Project**	Active	**1,534.57**	AEU
Fire Plan	**State Parks Gold Fields**	Active	**186.54**	AEU
Fire Plan	**State Parks Tahoe Basin Fuels Reduction**	Active	**624.18**	AEU
CFIP	**Tamarack CFIP 2021**	Complete	**415.60**	AEU
Forest Health	**TCSI El Dorado/French Meadows**	Active	**10,420.14**	AEU
Fire Plan	**Turtle Rock Park Biomass Collection Site**	Active	**0.58**	AEU
VMP	**Van Vleck / Shooting Center 2016**	Active	**1,608.89**	AEU
CFIP	**Volcano CFIP 2023**	Active		AEU
		Totals	**80,706.25**	

***TOTALS REPRESENT PROJECT ACRES, NOT ACRES TREATED**

North Division

Battalion 1 Hazard / Target Areas

The fuels within Battalion 1 are diverse, and include approximately 18% timber, 33% brush, and 49% grass/oak woodland.

Like many areas in the Sierra Nevada foothills, this area contains a significant wildland-urban interface problem. All communities within Battalion 1 SRA are evaluated using the following general and specific criteria to determine their Hazard/Target status:

- Potential for life loss
- Potential for property loss
- Potential for high community consequence (historical, environmental, infrastructure, etc.)
- Fuel types and fuel loading
- Ingress and egress
- Stakeholder collaboration

All communities within Battalion 1 meet the Target Hazard Criteria, some to a greater or lesser degree than others listed. According to FRAP data, approximately 88% of Battalion 1 is rated as high or very high in SRA fire severity ratings.

Battalion 1 Current Projects:

Sly Park VMP

This project is a 1,200-acre fuels treatment project that prescribes the creation of a Defensible Fuels Zone/shaded fuel break between Park Creek Road and Jenkinson Lake with the utilization of broadcast burning as well as hand treatment by CAL FIRE hand crews, heavy equipment and engines. This project provides a fuel break for the surrounding communities and natural resources adjacent to Sly Park Recreation Area. This shaded fuel break was utilized in slowing and diverting the Northward spread of the Caldor Fire away from Pollock Pines. CAL FIRE works in cooperation with Sierra Pacific Industries (SPI) and El Dorado Irrigation District (EID) to continually reduce the fuel loading and improve forest health on their lands. Landowners, situated along the border of the project, will be allowed to participate in the Sly Park Fire Safe Project by including their residential parcels in the fuel break. Project work will continue from the 2nd Dam to Park Creek Road (North and East of Jenkinson Lake).

Prairie City OHV Park VMP

The project area is located 13 miles east of the City of Sacramento and 3 miles south of U.S. Highway 50, along White Rock Road. This project is a range improvement and live fire training exercise over grass lands. Two particularly invasive and destructive species that occurs throughout the grassland is Medusa head and Yellow Star Thistle. These species can be effectively controlled with properly timed burning. CAL FIRE will utilize live fire exercises to treat the grasslands. All firing operations will be in conjunction with the unit training program. We expect rangeland project work to be conducted between May and August annually for training and invasive species control between October and November annually for training and thatch reduction. This Project has been inactive since 2019, however there are plans to make it active in Spring of 2025 for Vegetation Management and Live Fire training purposes.

Texas Hill

The Texas Hill community is defined for the purposes of this plan as the area bordered by Cedar Ravine Road on the west, Newtown Road on the east, the fuel break along the ridge adjacent to the airport on the north and Weber Creek on the south. The area encompasses approximately 900 acres and includes single-family residential and rural residential uses and timberland zoned Timber Production Zone. The predominant land use within the Texas Hill community is single family residential with lot sizes ranging from 2.5 acres to 20.0 per unit (Table 3). They are more concentrated in the southwestern part of the planning area and within the Texas Hill Estates development.

The majority of the planning area is characterized by gentle to moderately steep terrain. Elevations range from 2000-2400 feet. Slopes greater than 45 percent are found along the Weber Creek drainage and in a few isolated locations. The primary hydrologic feature is Weber Creek, a perennial stream. Relatively steep areas north of the New Weber Ditch and along Weber Creek are places where wildfire risk is greatest due to difficulties staging suppression forces and propensity for fires to race uphill under high winds. In addition to the wildfire risk inherent to vegetation communities as affected by topography and weather, there is also the risk of ignition. In El Dorado County and in most of California, risk of ignition is closely related to the presence of humans. In the planning area, likely sources of ignition include roads and residences.

The Texas Hill community planning area is bounded on the west by Cedar Ravine Road and on the east by Newtown Road. Both roads provide access to Highway 50 and would serve as the primary evacuation routes from the community in the event of an emergency. A formal evacuation route is located on Big Barn Road that connects to New Town Road. Texas Hill Road and most of the internal roads in the community including Big Barn Road, Gingham Court, Nugget Lane, Promenade Lane, Fairover Drive and other local roads are commonly bordered by excessive vegetation that poses a risk of ignition and wildfire and potentially would impair access by emergency vehicles during a wildfire or other disaster.

The next steps in the planning process will be to prepare an environmental analysis of the proposed treatments. Conducting database searches to determine if there are any notable historic or pre-historic resources in the planning area, estimating the potential impacts of treatments on vegetation and wildlife and evaluating any potential effects on other natural resources or socio-economic conditions. Measures to ensure avoidance of impacts will be incorporated into the analysis. Ultimately, a project package including the proposed treatments and environmental analysis will be prepared as a proposal for funding to be submitted during the next cycles of CAL FIRE and Sierra Nevada Conservancy grant for wildfire prevention projects.

Weber Creek Grant

El Dorado County has secured a grant from the California Wildfire Mitigation Program to launch a pilot project aimed at creating defensible space and retrofitting homes for ignition-resistant construction. This three-year initiative will target 525 homes at high risk from wildfires along the Weber Creek drainage area south of Placerville. In addition to the grant funding, El Dorado County is contributing its own funds to support the effort. Each home within the project area will undergo assessments to determine necessary defensible space and home hardening improvements, which will be provided to eligible homeowners at no cost, up to a maximum dollar limit. This inclusive program is open to all residents within the project area, including those meeting social vulnerability criteria outlined by the California Wildfire Mitigation Program.

The grant's Phase 1, focusing on environmental review requirements, was approved on June 28, 2023, with project implementation anticipated to commence in late 2025/early 2026 during Phase 2.

Fire Adapted 50 – Sly Park – Phase I, II, III

The Sly Park Vegetation Management Project is located near Pollock Pines and close to the southern edge of the King Fire Burn area which consumed 97,717 acres in the fall of 2014. The event threatened 12,000 residences, destroyed 12 residences and 68 other structures and damaged critical infrastructure including facilities, roads, bridges, and electrical transmission and distribution lines.

The overall objectives of this project are to return forests and wildlands to a more natural, fire resilient condition and to ensure that the community's risk has been reduced. This fuel modification treatment strategy has identified Sly Park as a WUI defense zone where the focus is on protecting life and property. The strategic fuel management project should help to contain wildfires and facilitate long-term stewardship through practices such as continued mechanical and hand treatment and prescribed fire.

Specific objectives include:

- Support an all-lands approach to create fire resilient and fire-adapted communities along the Highway 50 corridor.
- Use existing fuel breaks and forest treatments to create large, more fire resilient fuel breaks.
- Protect communities, infrastructure, and forest resources within the WUI.
- Conduct vegetation prescriptions to reduce fire hazard, improve tree growth, and increase forest resiliency.
- Conduct vegetation prescriptions to reduce the rate of spread, duration and intensity, and fuel ignition of crowns.
- Retain or enhance ecosystem processes compatible with the fuel hazard reduction prescription.

- Assess carbon sequestration and greenhouse gas reduction benefits by reducing the likelihood of wildfire emissions, improving the health and growth rates of trees and exploring various biomass utilization opportunities.
- Identify measures that may be required to protect watershed values and water quality in watersheds that are important sources of domestic water supply.

In addition to phase I, the Fire Adapted 50 fuels reduction project is comprised of two other phases, phases II & III. Portions of phases II & III are under a Good Neighbor Authority (GNA) agreement between CAL FIRE and the USDA, Forest Service, Region 5 – Eldorado National Forest. Both phases II & III have the same overall objectives as those stated above. Phase II runs from Slab Creek Dam to the town of Pollock Pines. Phase II is primarily to enhance and maintain fire suppression line established during the King Fire of 2014. Phase III is from Icehouse Road to Echo Summit along the Highway 50 corridor.
Specifically, under the GNA agreement CAL FIRE AEU has been contracted to implement fuels reduction work on the north side of the highway for 300 feet from the road's edge.

This fuels treatment work was accomplished in 2021 primarily by CAL FIRE crews out of Growlersburg Camp in Georgetown. The phase III fuels reduction work is being done under a NEPA document, the Roadrunner Environmental Assessment (EA). The environmental analysis for phase II NEPA & CEQA under the GNA has been subcontracted out by CAL FIRE to the Georgetown Divide Resource Conservation District (RCD) to perform.

Fire Adaptive 50 (FA50) project phases 1, 1.a, II & III

This was a landscape level fuels reduction project which demonstrated a cross-jurisdictional, all lands wildland fire management strategy through cooperation and coordination along the Highway 50 corridor area in a high fire hazard area. The three main goals accomplished by the project were:

Resilient landscapes
Fire Adapted Communities
Safe and Effective Wildfire Response

Portions of this fuel break were used in containing the Caldor Fire keeping the fire South of Highway 50 in the White Hall and Kyburz Communities in August 2021

Partners include:

CAL FIRE
El Dorado County and Georgetown Divide Resource Conservation Districts (RCD) USFS - El Dorado National Forest
Sierra Pacific Industries (SPI)
El Dorado Irrigation District
(EID) CAL TRANS
Private Landowners

Battalion 2 Current Projects

Auburn Lake Trails Fire Safe Project

The Auburn Lake Trails subdivision is situated at the rim of the American River canyon near the community of Cool. Exclusion of fire and the heavy public use below the subdivision create a very hazardous condition with respect to the potential for ignition. The topography, fuels, and significant numbers of homes create a combination of factors that will cause significant resource damage as well as a major risk to life safety within the community.

The primary strategy is to establish defensible fuel zones around and within the subdivision. CAL FIRE crews have conducted VMP project work on federal lands adjoining the subdivision. Private landowners will be asked to participate in the VMP so fuels reduction will continue on private lands between homes and the federal lands project area. The property owner's association retains control of all the common area within the subdivision and is the primary partner with the Auburn Lake Trails VMP. Currently CAL FIRE has treated approximately 200 acres of federal and private lands.

Georgetown Divide VMP

This complex of Ranches (Bacchi- Lewis- Baer Ranches) sits between the communities of Garden Valley, Greenwood and Coloma. This encompasses approximately 5000 acres of rangeland, oak woodland, brush, and timber as well as WUI. It currently has a road system that connects the communities and can be utilized for response. Additionally, the project has provided usable fuel breaks as well as fuels conversion treatment. Range land improvement has also been an objective in the project by fuels conversion as well as noxious weed eradication. Most work has been accomplished through training opportunities such as live fire and heavy fire equipment training.

Lyon Ranch VMP

This VMP is currently in the approval and development process. It encompasses 1400 acres in the Pilot Hill area. Fuels consist of grass, oak woodland, brush and timber. The goals of the VMP are to create a fuel break between the numerous homes surrounding the property by fuels reduction. Range land improvement has also been an objective in the project by fuels conversion as well as noxious weed eradication. The VMP will also provide an area for training opportunities which will also accomplish the other goals of this project.

El Dorado County Road Clearance (CCI Funded – CAL FIRE and DOT)

CAL FIRE and El Dorado County DOT are using SRA Fee Funds in a cooperative effort to remove roadside vegetation along four high hazard roads. This work is imperative for safe ingress and egress in the event of an emergency. Both agencies will be involved with fuel reduction. Roads to be treated will be determined as the project and funding nears.

American River Canyon Perimeter Shaded Fuel Break (Georgetown Divide Resource Conservation District)

The community of Auburn Lake Trails and surrounding watershed is a high priority area located in the American River Canyon along the Middle Fork American River watershed based on assets at risk as defined in the California Fire Plan.
This project entails removing un−merchantable sized trees and brush to create a modified shaded fuel break. The shaded fuel break will be constructed by combination of treatments to include mechanical; hand crews utilizing hand tools and may include pile and burns. The Bureau of land management has been maintaining the fuel break on its side of the line and The Auburn Lake Trail Fire Safety and Improvement Council was recently (2024) awarded a CAL FIRE Wildfire Prevention Grant to maintain the entire fuel break that was created under AEU’s Auburn Lake Trails VMP on the Auburn Lake Trails side of the line.

Salmon Falls VTP

The dispersed community of Pilot Hill including Rattlesnake Bar Road, Salmon Falls Road and surrounding watershed is a high priority area located in Georgetown divide area of El Dorado County situated between the north and south forks of the American River Canyon. This project entails the establishment and maintenance of shaded and unshaded fuel breaks and will consist of fuel reduction projects that will utilize fire crew cutting and pruning of trees, mechanical treatments, pile burning, dozer, tractor mastication, and broadcast prescribed fire where appropriate to reduce fuels in and below these communities. Cooperator, American River Conservancy, is concurrently operating the South Fork American River Forest Health Grant within the footprint of the VTP.

South Division

Battalion 3 Projects

Doaks VMP

This project creates a 2,190-acre fuel break on Doaks Ridge and surrounding lands to tie the Antelope Fuel break in with SPI fuel breaks on Cooks Ridge. This project is ongoing and will consist of mechanical work, crew work and broadcast burning. Most of the work will be on PG&E and SPI ground. This project is VMP funded and supported with labor from Pine Grove Camp.

Shake Fiddletown VMP

This project develops and maintains a 2,526-acre fuel break along Shakeridge Road and Fiddletown Road. This project is a continuation of the Shake Omo VMP that was completed in 2009. This project is ongoing and will consist of mechanical work, crew work and broadcast burning. This project is VMP funded and supported with labor from Pine Grove Camp.

Shake Omo VMP

This is a cooperative VMP that includes acres in Battalion 1 within El-Dorado County and acres within the El Dorado National Forest. The project will maintain the 4,748-acre Shake Omo and Garrabaldi VMPs which were completed in 2009. This project is designed to defend against an East Wind driven fire coming from the El Dorado National Forest. It will extend from the Shake Fiddle - Shaded Fuel Break and provide protection to the communities of Lockwood, Pioneer, and Omo Ranch.
Though the project was completed in 2009, in January of this year we started retreatment consisting of mechanical work, crew work and prescribed fire.

Amador County Road Clearance (CCI Funded – CAL FIRE and DOT)

CAL FIRE and Amador County DOT are using SRA Fee Funds in a cooperative effort to remove roadside vegetation along strategic roadways in high fire hazard areas. This work is imperative for safe ingress and egress in the event of an emergency.

Both agencies will be involved with fuel reduction along the following roads:

- Fiddletown Road
- Quartz Mountain Road
- Shake Ridge Road
- Pine Gulch Road
- Lupe Road

- Clinton Road
- Pioneer Creek Road
- Tiger Creek Road
- Ridge Road
- Hale Road

Pine Acres VMP (CCI Funded-Partially)

This project creates a 2,190-acre, multi-year, multi-agency project continuation and improvement of the Pine Acres fuel break. This fuel break will tie into the Butte Fire burn and proceed north to Highway 88

along the Mokelumne River Canyon edge to protect the community of Pine Acres. The first phase was funded by grants received by the Amador Fire Safe council, and the work will be completed by crews from Pine Grove Camp. In 2021 PG&E and CAL FIRE cleared brush around Lake Tabeaud using mechanical treatment, prescribed fire and pile burning. The goal will be the continued treatment of fuels along the Mokelumne River and Sutter Creek drainages, to protect the greater Pine Grove Community.

Mitchell Mine Fuel Break

This project is connected to the Pine Acres VMP and includes BLM, BIA, the Amador Fire Safe Council, and CAL FIRE. Currently this project is in an herbicidal maintenance phase and funding is set to expire in June of 2025. This project includes fuels treatment on the Indian Grinding Rock State Park, BLM property and on Mitchel Mine Road and Lupe Road.

Tiger Creek/Doaks Fuel Break

This project develops a defensible fuel zone extending west from the Antelope Fuel Break to the Tiger Creek Power Plant on the Mokelumne River. This will tie into the current ongoing work on the Calaveras side of the drainage. We will continue to coordinate with other groups such as PG&E, SPI and USFS to facilitate ingress/egress and route clearing.

Battalion 4 Projects

Amoruso VMP and Training:

Vegetation Management Project. This project is:

1) A range improvement and live fire training exercise over upland grass lands. The upland grasslands, which make up the vegetation type, are primarily mixed non-native grasses and forbs (*Bromus* spp., *Avena* spp., *Erodium* sp., *Brassica* spp.) with some native forbs present. Two particularly invasive and destructive species that occur throughout the grassland are medusa head (*Taeniatherum caput-medusae*) and Yellow Star Thistle (*Centaurea solstitialis*). Both species can be effectively controlled with properly timed burning. Broadcast prescribed fire will be utilized to treat rangelands that are significantly damaged by the invasion of Medusa head and Yellow Star Thistle.

2) CAL FIRE will utilize live fire exercises to treat the upland grass lands. All firing operations will be conducted as a part of the unit training program. We expect rangeland project work to be conducted between May and August annually for training and invasive species control and between October and November annually for training and thatch reduction. The equipment to be used will be Type III fire engines from AEU. A technique referred to as black lining will be utilized to create control lines as well as to break the project area into approximately 10-acre blocks.

   Each block will be used as a separate training area. Firefighters will utilize water in the engines to spray water over the grass which will then be set on fire at the leading edge of the wet grass. An additional group of firefighters will be doing the same evolution in parallel up wind which will create a 25-30-foot-wide strip that is" blacked" off. This backing fire will be the control line and the first training evolution of the firing class. These black lines will be the basis of the grid for the training exercise.

3) This project will also consist of fuels reduction work undertaken:

   a) As part of the Units S-212 tree faller training and recertification class's cutting of dead and diseased foothill pine (*Pinus Sabiniana*), and Ponderosa Pine (*Pinus Ponderosa*) as tree mortality has accelerated within the VMP since the drought year 2015.
   b) As part of fire crew line construction training that will utilize hand brush cutting, and heavy fire equipment operation in brush. Under burning of piles that are generated will be completed in the fall winter and spring when weather conditions permit.

Van Vleck VMP and Training Site:

Through VMP agreements, the Unit uses two sites in eastern Sacramento for training purposes. Each year the Unit burns between 200 and 400 acres of grass. We use this land to conduct Intermediate Firing Class and the FI 210 investigation class. This gives our Unit personnel valuable training, while providing for range improvements and vernal pool habit improvements.

River Pines Community Fuel Break

River Pines Fuel Break includes vegetation clearance, removing ladder fuels including dead or dying trees, and providing fuel breaks in critical and strategic locations, to prevent wildfire intensity including rate of spread to protect habitable structures and infrastructure. The plan will include modifying vegetation adjacent to roads to provide safer ingress and egress for evacuating residents and responding emergency personnel. Additionally, the plan will provide community level fire prevention programs like community chippings days, roadside chipping, and temporary green waste bin programs.

Amador County Road Clearance (SRA Fee Funded – CAL FIRE and DOT)

CAL FIRE and Amador County DOT are using SRA Fee Funds in a cooperative effort to remove roadside vegetation along ten high hazard roads. This work is imperative for safe ingress and egress in the event of an emergency.

Both agencies will be involved with fuel reduction along the following roads:

- Fiddletown Road
- Lawrence Road
- Tyler Road
- Ostrom Road
- Quartz Mountain Road
- Shake Ridge Road
- Clinton Road
- Sutter Creek Volcano Road
- Butte Mountain Road
- Middle Bar Road

Butte/Electra Fire Burn area:

Work will continue with Local, State and Federal cooperators to maintain reduced fuels in the Butte and Electra fire areas and identify future fuel reduction projects within the Battalion.

East Division

Battalion 6

In addition to the projects planned under the SNPLMA funding, CAL FIRE provides financial, personnel, and administrative support to a wide array of projects within the Tahoe Basin and Alpine County. According to FRAP data, approximately 91% of Battalion 4 is rated as high or very high in SRA fire severity ratings. The following list represents the various fuels reduction, defensible space inspection, and support projects located within Battalion 6:

PROJECT ID	EIP Number	Method	SIZE (ACRES)	IMPLEMENTING ENTITIES	OWNERSHIP
South Tahoe- Montreal WT	02.01.01.0106	Mechanical Thin	463	USFS	Federal
Ski Run Bijou	02.01.01.0100	Hand Thin/Chip	65	Conservancy	State CA
Gardener Mtn./Tahoe Keys Urban		Hand Thin/Chip	58	Conservancy	State CA/Federal
South Lake Tahoe- Defensible Space Inspections- Area 1	02.01.02.0005	Defensible Space Inspection	3,300 parcels	SLTFR	Private
Forecasted Projects (2 years)					
Tahoe Keys Larger Acreage		*Hand Thin/Chip*	*35*	*Conservancy*	*State CA/Federal*
Airport East Side Haz. Fuels Reduction	*02.01.01.0121*	*Hand Thin/Chip*	*20*	*SLTFR*	*SLTFR*
56 Acre Parcel		*Hand Thin/Chip*	*50*	*SLTFR*	*SLTFR*
Shay Creek, Alpine County		*Hand Thin/Chip*	175	*CAL FIRE*	*Private*

APPENDIX B: COMMUNITY WILDFIRE PROTECTION PLANS (CWPPs)

Community Wildfire Protection Plans (CWPPs) are locally developed documents that outline strategies for reducing the risk of wildfire to communities and surrounding landscapes. CWPPs are critical tools for identifying high-risk areas, prioritizing fuels treatments, and coordinating wildfire prevention efforts across multiple stakeholders. These plans bring together the priorities of various fire agencies and partners, ensuring a cohesive, community-focused approach to wildfire risk reduction.

CAL FIRE plays a central role in the development, implementation, and ongoing support of CWPPs across the state. As a key participant and signatory to each CWPP, CAL FIRE collaborates with local fire agencies, federal partners, and other wildfire resiliency organizations to conduct risk assessments, identify priority treatment areas, and develop strategies for wildfire mitigation.

The process of developing a CWPP typically involves extensive stakeholder engagement, including input from local governments, residents, and technical experts. The resulting plans provide a roadmap for reducing wildfire risk and increasing community resilience, with a focus on defensible space, fuels management, and preparedness efforts. While CAL FIRE and other key partners lead the development of these plans, local communities are integral to the process, ensuring that the strategies reflect local needs and priorities.

CWPPs in the Amador-El Dorado Unit (AEU) are developed through a collaborative effort, with representation from CAL FIRE, local fire agencies, federal land management agencies, and other wildfire resilience groups. CAL FIRE's involvement includes participation in the risk assessment process, identifying high-risk areas, and planning and implementing fuels reduction and other mitigation activities. The goals of the CWPPs often align with the priorities of CAL FIRE AEU, though the CWPPs themselves may reflect unique needs of specific communities or landscapes.

This appendix will provide an overview of the CWPPs developed within the AEU, detailing the key plans, the process by which they were created, and CAL FIRE’s role in shaping and implementing the strategies within them. By integrating the CWPPs with the unit fire plan, we demonstrate alignment in wildfire resiliency and support for the CWPP’s themselves.

Community Wildfire Protection Plans within CAL FIRE – Amador El Dorado Unit

Western El Dorado County Community Wildfire Protection Plan

The existing Western El Dorado County Community Wildfire Protection Plan (CWPP) was sponsored by the El Dorado County Fire Safe Council and officially accepted by the El Dorado County Board of Supervisors on April 20, 2022. The El Dorado County Office of Wildfire Preparedness and Resilience, in partnership with the El Dorado County Fire Safe Council and CAL FIRE AEU, is leading a comprehensive plan update addressing wildfire risks across the county's western slope, integrating input from local communities and stakeholders. The updated CWPP, set to be released in 2025, will serve as a strategic framework for wildfire risk reduction and community resilience efforts in the region.

https://www.eldoradocounty.ca.gov/Public-Safety-Justice/Wildfire-Disaster/Office-of-Wildfire-Preparedness-and-Resilience/Community-Wildfire-Protection-Plan-CWPP

Lake Tahoe Basin Community Wildfire Protection Plan

The 2025 Lake Tahoe Basin Community Wildfire Protection Plan (CWPP) was collaboratively developed by the Tahoe Resource Conservation District (Tahoe RCD), the Tahoe Fire & Fuels Team, and CAL FIRE AEU, with funding from the California Tahoe Conservancy through a Regional Forest and Fire Capacity grant. Finalized in February 2025, the CWPP integrates community input gathered through public meetings and surveys. This CWPP employs advanced tools like Vibrant Planet’s software to model fuel reduction scenarios and prioritize treatments.

https://tahoe-basin-cwpp-trcd.hub.arcgis.com/

Amador County

In Amador County, the Amador Fire Safe Council, in partnership with CAL FIRE AEU and local fire protection districts, has developed several CWPPs to address the unique wildfire risks of the area. The county-wide CWPP was initially adopted in 2005 and has since been updated to reflect changing conditions and priorities. CAL FIRE AEU is currently engaged in co-development of an updated Amador County CWPP. Additionally, specific CWPPs have been created for communities such as Pine Grove (2012), Pioneer/Volcano (2012), and the High-Country region (2016).

https://www.amadorgov.org/departments/planning/wildland-fire

https://www.amadorfiresafe.org/evacuation-preparedness

https://www.amadorfiresafe.org/high-country-cwpp-2016

Alpine County

The Alpine County Community Wildfire Protection Plan (CWPP) was initially developed in 2005 and most recently updated in 2018. This plan was created through a collaborative effort involving Alpine County, the Alpine Fire Safe Council, CAL FIRE AEU, and other local stakeholders. It outlines wildfire risks and mitigation projects across many communities within Alpine County and serves as a foundational document for grant applications and wildfire risk reduction initiatives. The CWPP is currently undergoing an update process, which will incorporate public input to reflect evolving wildfire risks and community priorities.

https://www.alpinecountyca.gov/497/Community-Wildfire-Protection-Plan

Placerville Wildfire Resiliency Strategy

The Placerville Wildfire Resilience Strategy (PWRS) is a community-specific wildfire mitigation plan developed through a partnership between the El Dorado County Resource Conservation District (RCD), the City of Placerville, El Dorado County, and CAL FIRE Amador-El Dorado Unit (AEU). Funded by a Regional Forest and Fire Capacity grant from the California Department of Conservation, the strategy encompasses approximately 80,000 acres, including the City of Placerville and surrounding communities. It integrates wildfire risk assessments, evacuation planning, and prioritization of fuel reduction projects to enhance community resilience. The PWRS was presented to the Placerville City Council on January 29, 2025, and serves as a guiding document for future wildfire preparedness and mitigation efforts in the region.

https://www.eldoradorcd.org/placerville-wildfire-resilience-strategy

APPENDIX C: AMADOR – EL DORADO UNIT PLANS

Unit Specific Plans

AEU has developed additional documents to aid in the operational decision-making process. The documents are the Ignition Management Plan, and the Defensible Space Inspection Plan.

AEU Ignition Management Plan

It is the goal of the Unit to investigate all fires according to established procedures, quickly identify arson and/or potential civil cost recovery fires, and to staff and manage investigations adequately and cost effectively. Fire incident documentation and reporting is critical to the development of the Unit's Ignition Management and Fire Prevention Plan. In 2012, the Fire Prevention Bureau updated the Unit's Fire Incident Documentation Policy. The new policy directive should streamline the reporting and investigation of vegetation fires. In addition to the updates done within the Unit, a statewide cadre developed a new version of the LE-66, Preliminary Fire Report. The updated LE-66 is easier to use and collects the most pertinent data used by Fire Prevention to reduce unwanted fires.

Current statewide and Unit policy requires that a report (LE-66 and CAIRS) be completed for every wildland fire. A wildland fire is defined as any uncontrolled vegetation fire which threatens to destroy life, property or resources and is either unattended or attended by persons unable to prevent the fires spread. Examples include vegetation fires burning uncontrolled (whether attended or not); vegetation fires that are a threat to life, property or resources; debris or control burns that have escaped the landowner's control; and any debris or control burn *without an escape* that was extinguished due to a *threat* to the wildland.

Defensible Space Inspection Plan

This Defensible Space Inspection Plan outlines the objectives, goals, and direction for Field Personnel and Forestry Aide / Forestry Technician Defensible Space Inspectors in carrying out PRC 4291/LE 100(a) Defensible Space Inspections. Considering California's recent fire history, fire prevention activities have become one of the state's top priorities. As such, the state's legislation enacted Public Resource Code 4137 to ensure high levels of fire prevention activities are maintained throughout the year. The Unit's objective is to conduct a minimum of 8,000 defensible space inspections annually, with inspections being conducted each month of the year. By achieving this objective, the Unit aims to achieve broader goals such as providing a margin of safety for firefighters and the public, increasing the survivability of homes and developments, and mitigating wildland fire losses and resource damage.

Defensible Space inspection areas are identified based on factors like call volume, structural density, evacuation concerns, fire history, and Fire Hazard Severity Zone rating. Battalion Chiefs will designate these areas within their geographic responsibility to conduct 4291 inspections for the year. In collaboration with the AEU's Wildfire Resiliency Program and local jurisdictions, we will enforce enhanced defensible space requirements in accordance with local regulations. 2025 AEU Ignition Management & Fire Prevention Plan

2025 AEU Ignition Management & Fire Prevention Plan

Introduction

The Amador-El Dorado Unit (AEU) is located in the North Central Sierra. It includes all of Amador, El Dorado, Sacramento, and Alpine Counties, as well as a portion of San Joaquin County. AEU encompasses over 2,600,000 acres; of this, over 1,000,000 acres is State Responsibility Area (SRA), and AEU's Direct Protection Area (DPA) serves over 900,000 acres.

The United States Forest Service, Bureau of Indian Affairs, Bureau of Land Management, and Bureau of Reclamation manage lands that are protected by the Unit. Conversely, the Forest Service provides direct wildland fire protection to private and state lands, or SRA, that are within the Eldorado National Forest, the Lake Tahoe Basin Management Unit and the Humboldt-Toiyabe National Forest.

The Unit contains all or part of four major watersheds. These watersheds contain the Middle and South Forks of the American River, the North Fork of the Mokelumne River, all three Forks of the Cosumnes River, and the Upper Truckee River in the Lake Tahoe Basin. Numerous water agencies and power companies utilize these watersheds for hydroelectric power generation, irrigation purposes, and public recreation.

CAL FIRE'S statewide, annual goal is to keep 95% of vegetation fires to less than 10 acres. Although weather and fuel conditions have a huge impact on the outcome of this goal, CAL FIRE and it's supporting agencies consistently strive to meet this with safe and aggressive fire attack.

Fire History

The Unit's fire history is one of numerous small fires with large fires occurring every ten to thirty years. The most recent large fires (greater than 10,000 acres within the Unit's DPA) were the following:

FIRE NAME:	YEAR:	ACREAGE:
Caldor	2021	40,066
Rancheria Creek	1961	34,104
Quarry	1976	20,870
Meiss	1981	14,126
Kelsey Mill	1961	11,816

In September of 2014, the King Fire burned 97,717 acres. Of that, 2,823 acres burned were within the Unit's DPA. In July 2014, the Sand Fire burned 4,240 acres within the SRA. In September 2015, the Butte Fire burned 70,868 acres on FRA and SRA. Of the 58,797 SRA acres burned, 3,626 acres burned were within AEU's DPA. Although the fire started in AEU, a vast majority of the damage caused by the Butte Fire was in TCU.

In 2021, there were two large fires within AEU. The Tamarack Fire started on July 4th in Alpine County on Fed DPA and burned 68,637 acres. Of that, 9,373 acres were SRA. On August 14 the Caldor Fire started on Fed DPA. This fire burned 221,786 acres from Omo Ranch to South Lake Tahoe. Of the 221,786 acres, 40,066 acres were SRA within AEU. The fire destroyed 1003 structures and damaged 81. Over the past twenty years, population growth and development in the wildland-urban interface (WUI) have placed additional homes, businesses and public infrastructure at risk from wildland fires. Both large and small fires often create wildland-urban interface fire suppression challenges previously only found in the most densely populated areas of Southern California.

Historically, the largest fires in the Unit, particularly in Amador County, are aligned east to west due to topography and prevailing winds. El Dorado and Sacramento Counties are more likely to experience fires which run from north to south - especially at the lower elevations. This is especially true during red flag fire weather conditions when strong north winds are predicted. However, large fires in El Dorado County can also follow an east to west orientation similar to fires in Amador County.

Fire Incident Documentation Policy

It is the goal of the Unit to investigate all fires according to established procedures, to quickly identify arson fires, and to staff and manage investigations adequately and cost effectively. Fire incident documentation and reporting is critical to the development of the Unit's Ignition Management and Fire Prevention Plan.

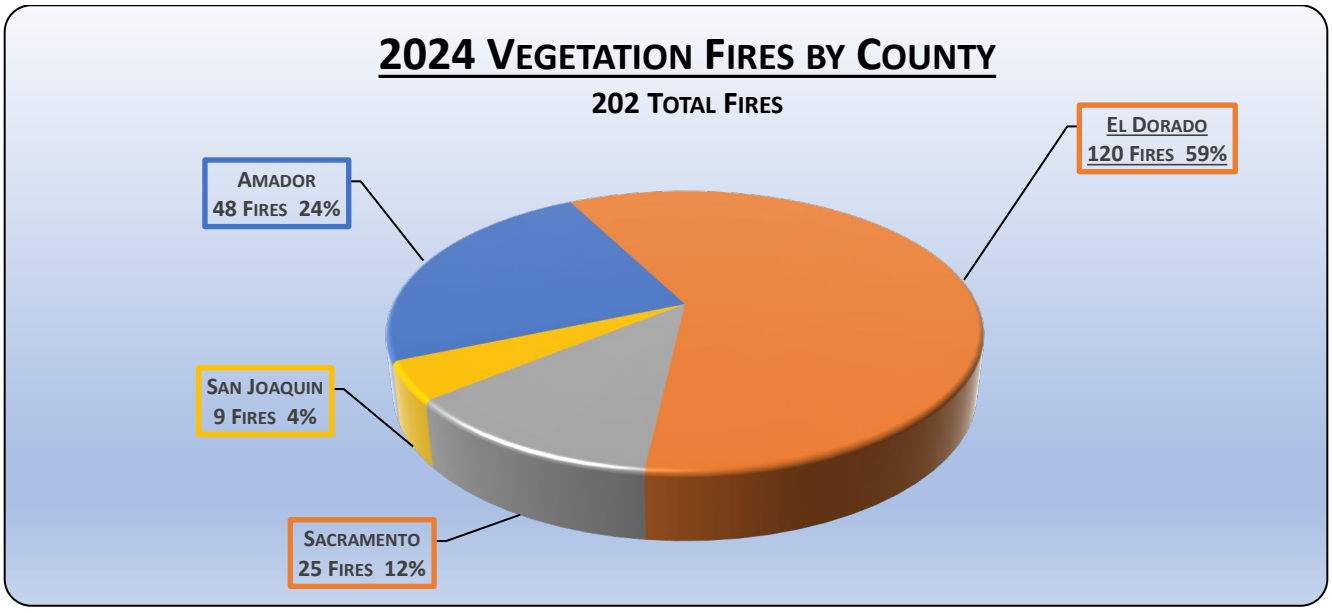
Current statewide and Unit policy requires that a CALFIRS Fire Report be completed for every wildland fire. A wildland fire is defined as any uncontrolled vegetation fire which threatens to destroy life, property or resources and is either unattended or attended by persons unable to prevent the fire's spread. Examples include vegetation fires burning uncontrolled (whether attended or not); vegetation fires that are a threat to life, property or resources; debris or control burns that have escaped the landowner's control; and any debris or control burn *without an escape* that was extinguished due to a *threat* to the wildland. A CALFIRS Incident report was completed for every wildland fire that occurred within AEU's DPA for 2024.

In addition, the Unit continues to utilize LE-38A's, Notice of Fire Hazard Inspection, for less complex investigations that do not warrant a citation by a public or peace officer. LE-38A's are utilized as an educational and enforcement tool when there is a violation of a Public Resource Code, Health and Safety Code, California Code of Regulation, or Air Quality Requirement. LE-38A's are forwarded to the Fire Prevention Bureau Chief within 7 days so necessary follow-up actions can be taken. It is the goal of the Unit that a Prevention Message be given after every wildland fire if a responsible party is identified. A prevention message will consist of either verbal education, with an LE-38a issuance, civil or criminal prosecution. It is the Units goal to utilize these forms of prevention messages to educate the public and prevent further ignitions from occurring.

2024 Fire Season Ignition Statistics

Wildland fire ignition statistics were tracked for the entire year of 2024. The Unit experienced 202 wildland fires within its Direct Protection Area (SRA-DPA). There was a decrease of 10 ignitions from 2023 (212 fires) and a decrease of 104 fires from 2020 (306 fires), which was the highest number of ignitions over the past 10 years. The 202 fires are 18 fires less than the 10-year average of 220 fires, which has been trending down. Wildland fire statistics are tracked based on information from each Fire Report submitted to the Law Enforcement and Investigations Bureau.

COUNTY	IGNITIONS WITHIN AEU DPA
Amador	48
El Dorado	120
Sacramento	25
San Joaquin	9
Alpine	0



2024 Five Largest Fires in AEU:

1) Crozier Fire ignited August 6th and burned 1,938 acres outside the community of Mosquito in El Dorado County. This was the second of two fires Jason Robinette was convicted of starting on August 6th. The first, the Mosquito Fire burned less than ¼ acre. Robinette was found guilty on January 30th, 2025 on 2 counts of arson and is currently awaiting sentencing.

2) Grant Fire ignited June 12th and burned 120 acres in Sacramento County near the Prairie City OHV Park. This fire was caused by a truck dragging a wench bar. No responsible party was identified for the cause of this fire.

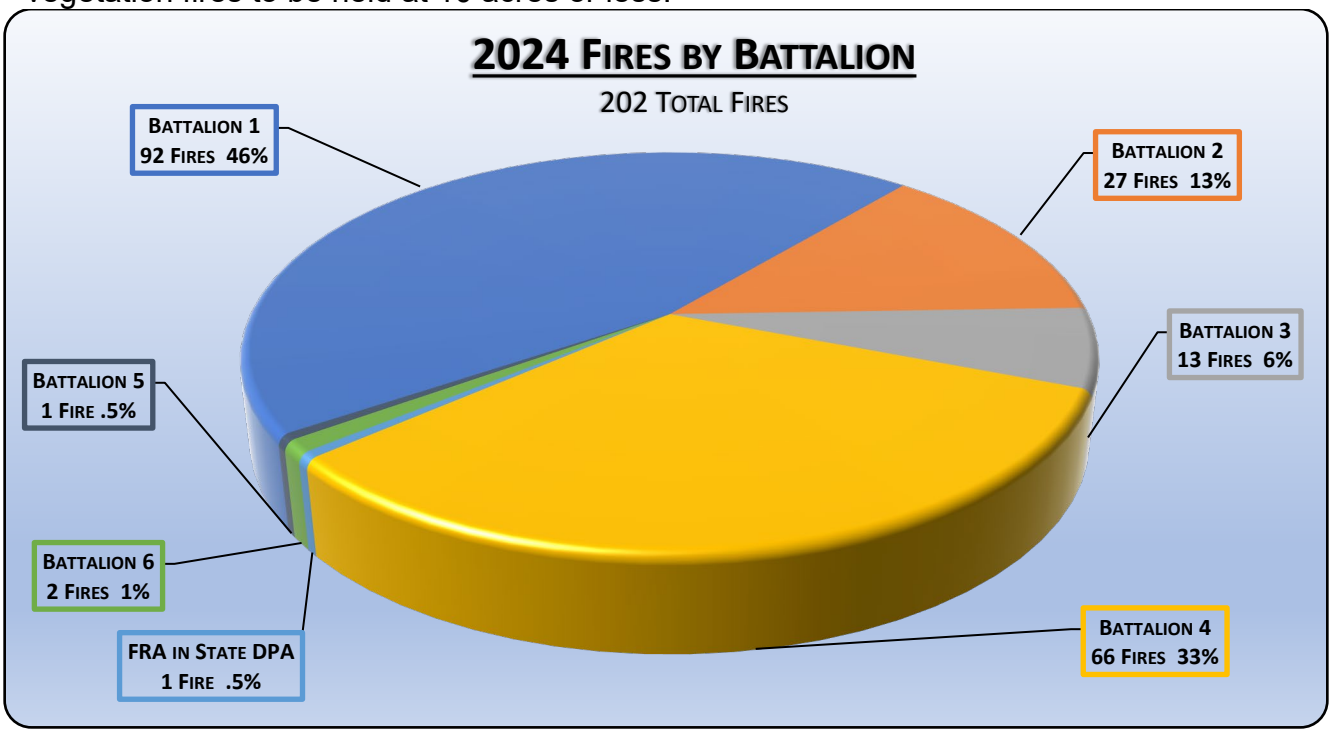
3) Meiss Fire ignited August 11th and burned 108 acres near the intersection of Meiss Road and Ione Road in Sacramento County. The cause of this fire is still under investigation. No responsible party has been identified.

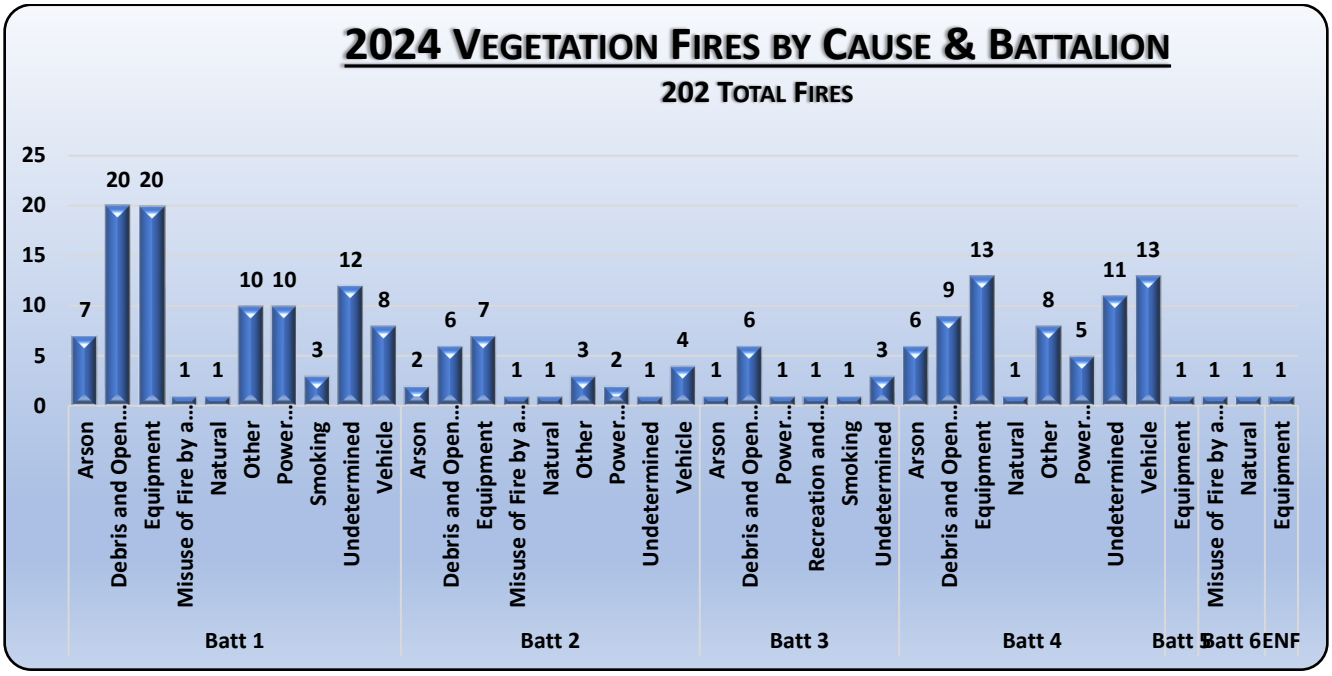
4) Liberty Fire, ignited on July 19th and burned 104 acres in San Joaquin County. The cause of this fire was a vehicle dragging something. The responsible party was identified with no legal action taken.

5) Pay Fire, on July 6th, burned 77.5 acres in the Placerville area of El Dorado County. The cause of this fire was a pine tree falling into the service drop to a residence. No criminal or civil action was taken for the cause of this fire.

Calculating all the fires that started within the Unit's DPA in 2024, approximately 2,747 acres burned (an increase from 383 acres in 2023). The top five fires contributed to 2,347 acres of that total, or 85% of the total acreage burned with AEU. The 10-year average for AEU is 2,172 acres. While AEU experienced a slight decrease in the number of ignitions as in recent years, in 2024, AEU experienced approximately 126% increase on the acres burned over the ten-year average.

Of the 202 vegetation fires in AEU in 2024, 13 fires were over 10 acres. **The Unit kept 94% of fires in 2024 below 10 acres.** This is just outside CAL FIRE'S goal of 95% of vegetation fires to be held at 10 acres or less.

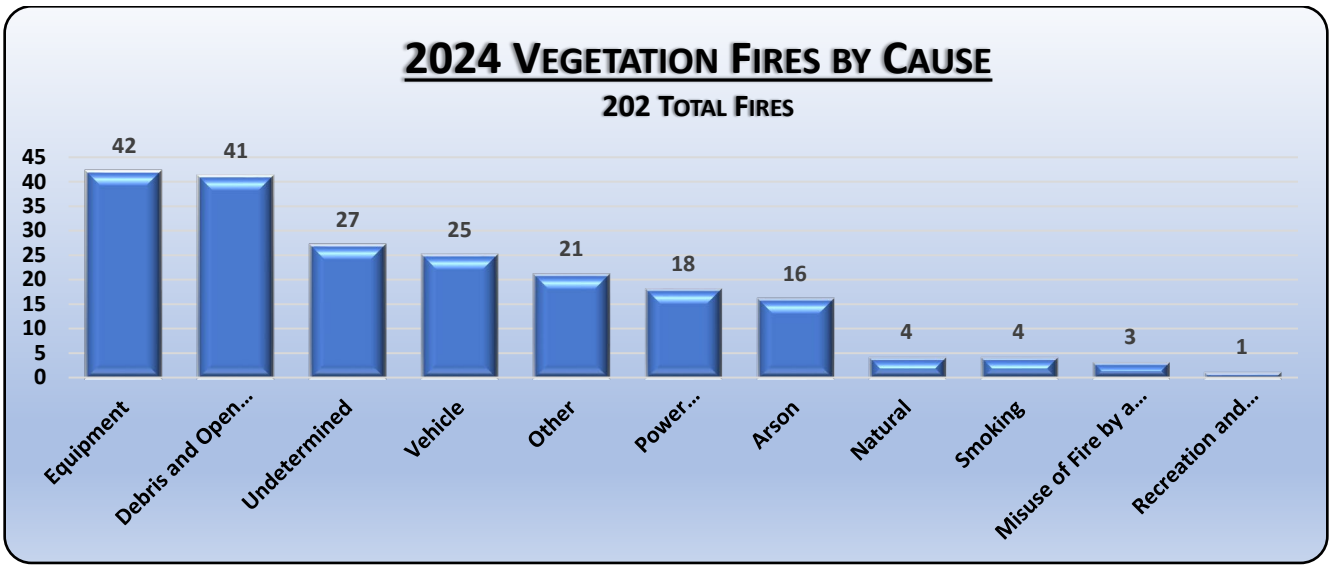




While reviewing fire causes during 2024, it was found that the five leading causes of wildland fires in AEU were:

1)	**Equipment**	**(42 fires – 21%)**
2)	**Debris Burning**	**(41 fires – 20%)**
3)	**Undetermined**	**(27 fires – 13%)**
4)	**Vehicle**	**(25 fires – 12%)**
5)	**Other**	**(21 fires – 10%)**
5)	**Power Generation**	**(18 fires – 9%)**

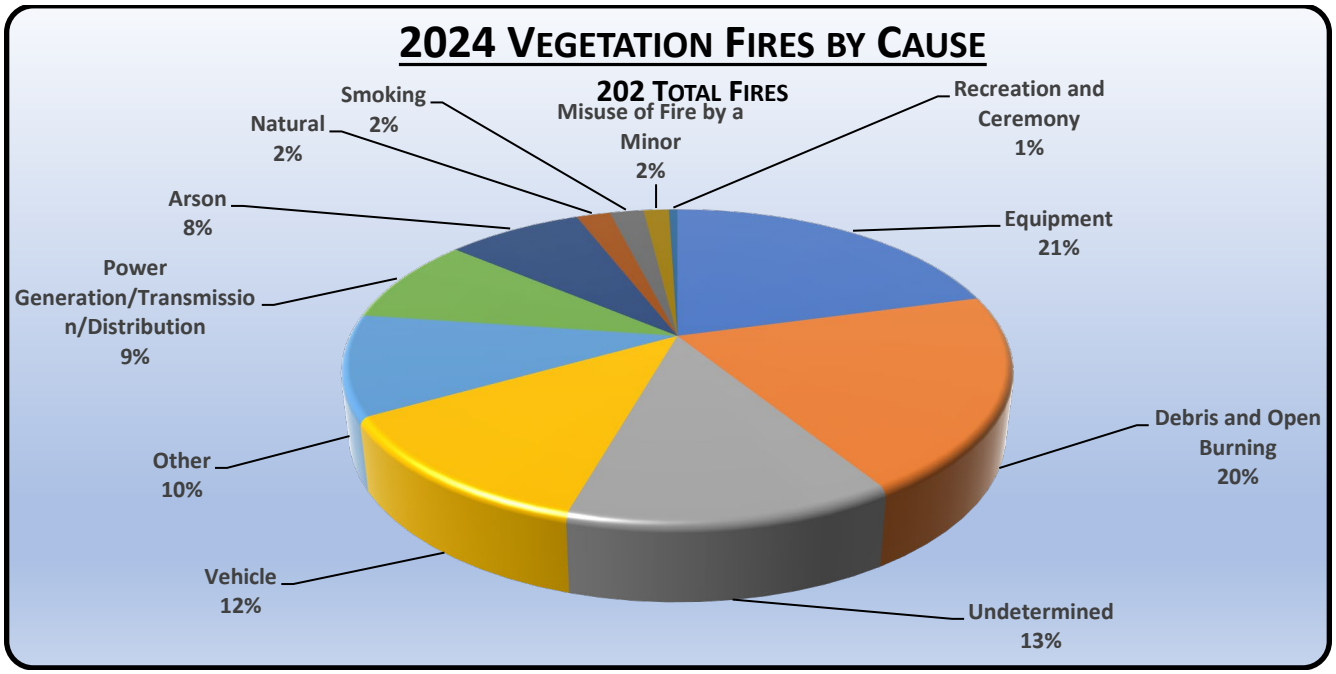
The five leading causes accounted for 174 fires, or 86%, of all 2024 fires that occurred.

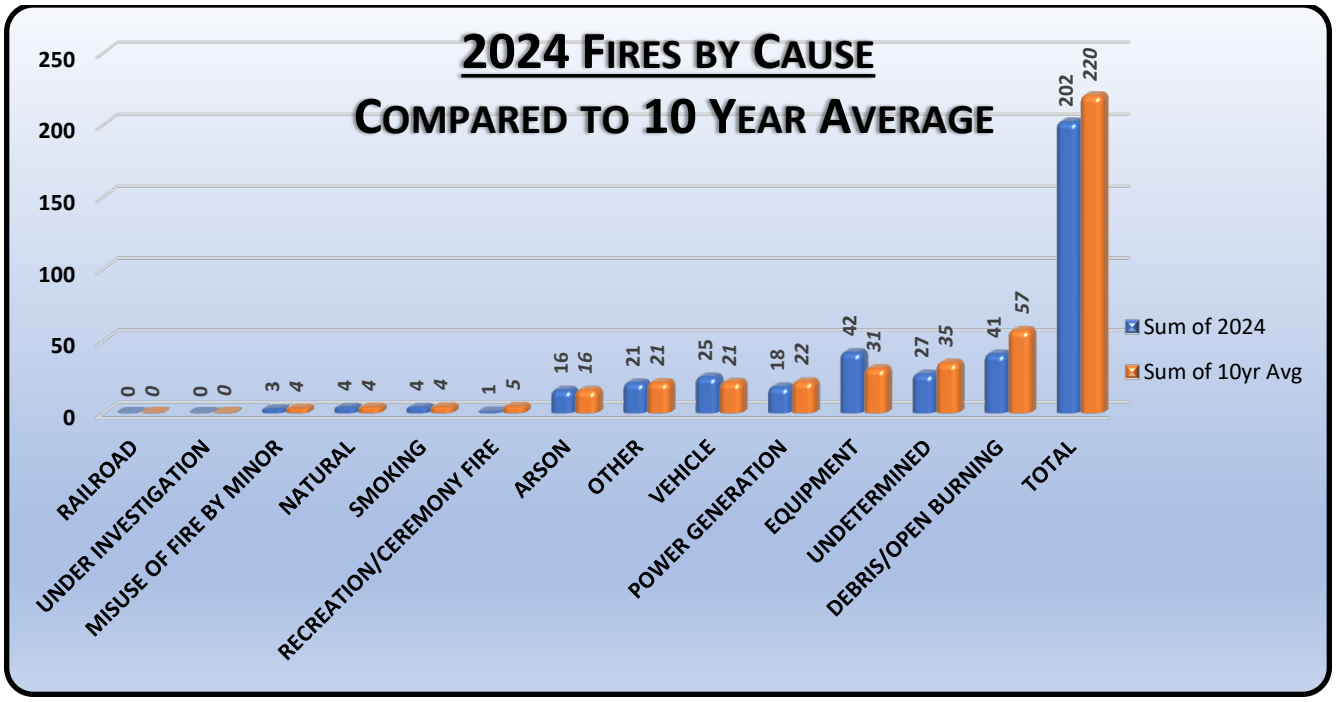


The remaining causes of fires in 2024 within AEU were:

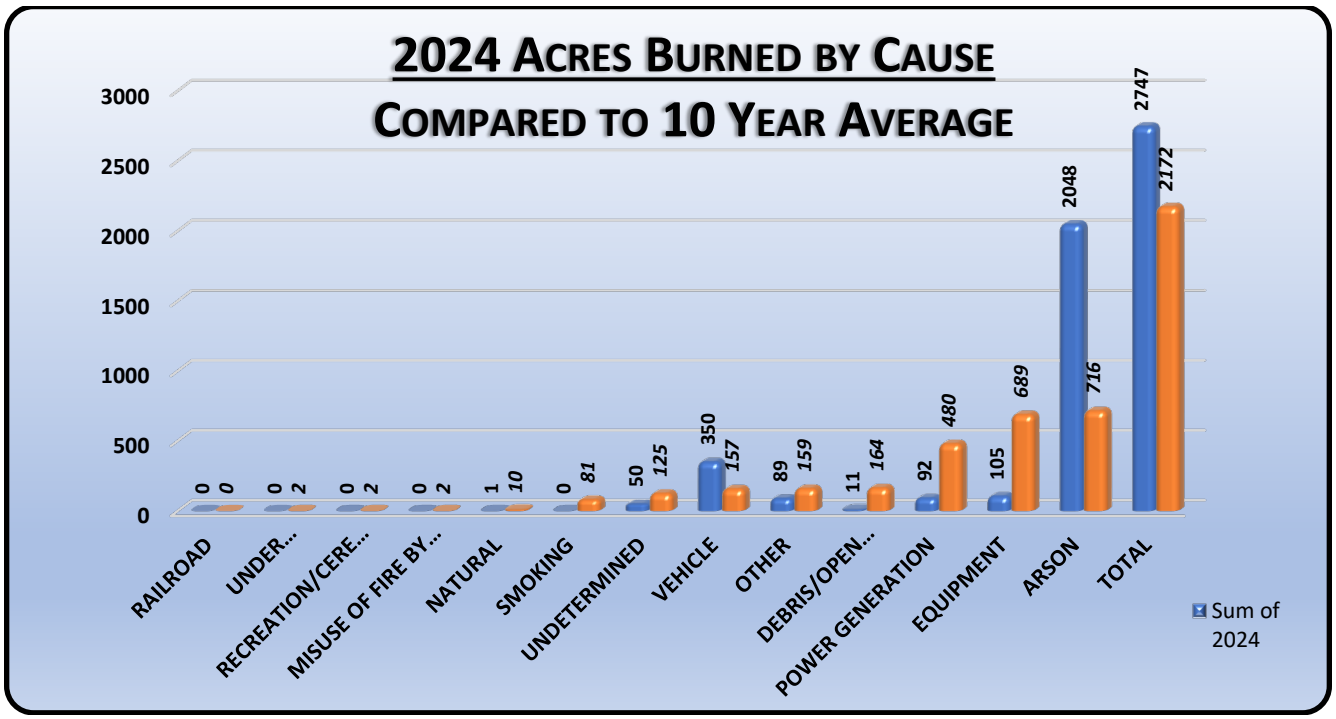
1)	**Arson**	**(16 fires – 8%)**
2)	**Natural**	**(4 fires – 2%)**
3)	**Smoking**	**(4 fires – 2%)**
4)	**Misuse of fire by Minor**	**(3 fires – 1.5%)**
5)	**Recreation/Ceremonial Fire**	**(1 fires – <.5%)**

The total of ignitions in 2023 was 212. In 2024, we had 202 ignitions, ten less than 2023 but relatively close to both 2022 and 2023. This trend continues through to the Wildland Cause Class. All causes in 2023 were similar to what AEU had in 2023 with slight fluctuations. However, in 2024 Undetermined, Power Generation, Debris/Open Burning, and Recreational/ Ceremonial Fires were all below the 10-year averages. Debris/Open Burning caused fires dropped to the second leading causes of fire for the first time in recent history in 2024 and was 16 less than the 10-year average. With new burn laws/regulations, it is imperative we continue to educate the public on safe burning practices. The number of Undetermined fires continues to trend down. In 2024, AEU had 27 which is below the 10-year average of 35. Through education and experience of our personnel, we hope the number of Undetermined fires continues to decrease. It is important to conduct a thorough investigation of every wildland fire we respond to, considering training, knowledge, experience, evidence at scene, as well as statements of witnesses to come to your conclusion of the Wildland Cause Class.





In 2024, there were 202 ignitions, 10 less ignitions then in 2023, and 18 less than the 10-year average of 220 fires which continues to trend down since 2020. To better address ignition management in the Unit, a more detailed analysis of the fires in each major cause classification was conducted.



1) **Equipment** use accounted for 42 fires, or 21% of the total ignitions in the Unit. Equipment caused fires resulted in approximately 105 acres being burned within the Unit in 2024. This acreage is well below the 10-year average of 689 acres. The main cause of equipment fires continues to be mowers. These fires typically start as a result of blades striking rocks, or friction igniting chaff collected around the belts, pulley systems or exhaust systems of mowers. Ironically, most of the mower caused fires occurred as a result of residents trying to clear their property for fire safety. Continued public education on the appropriate equipment to use in dry vegetation as well as the appropriate time of day (before 10:00 AM) and conditions to work will help reduce ignitions. The Law Enforcement & Investigations Bureau will continue to conduct enforcement action when violations of law are identified as well.

2) **Debris burning** accounted for 41 fires, or 20% of the total fires in the Unit. Debris caused fires resulted in approximately 11 acres burned within the unit for 2024. The 10-year average for this category is 164 acres burned. There was a substantial decrease in the number of ignitions from Debris Burning from 2023 (74 fires) to 2024. The 10-year average for Debris/Open Burning is 57 fires.

   While we encourage the use of burn piles to clean vegetation of property, we need to continue and even improve education on proper burning techniques. The Unit Management suspended all burning in the Unit in June due to dry conditions.

   Public education regarding the proper way to conduct debris burns, public safety and public awareness limited the number of these fires in recent years. 9-1-1 calls occur quickly when smoke is seen resulting in fire equipment arriving sooner at the scene of a fire. The number one cause of escaped debris burns continues to be lack of clearance around burn piles. Unattended debris burns also contributed to the totals. CAL FIRE engine companies are issuing an LE-38a notice when they determine a fire is caused by an escaped debris burn. These legal notices serve to educate the public and put them on notice that their next escape could result in a citation, arrest and/or recovery of fire suppression costs. Law Enforcement & Investigations Bureau personnel are also issuing citations when debris burn caused fires violate law or violate the terms of the burn permits issued.

   In addition, Law Enforcement & Investigations Bureau staff work closely with local Air Quality Management Districts in the event a debris burn violates Air District ordinances. Violations typically include landowners burning debris piles larger than four feet by four feet in size without a valid air quality permit; landowners burning illegal materials; and landowners burning on a no-burn day. Potential violations of air quality rules are forwarded to the local Air District office on a LE-38a for potential action. Monetary fines typically range from $40.00 to $500.00, or more, depending on the type of violation.

   Coordination between Air District offices and the Law Enforcement & Investigations Bureau is important in order to reduce the number of debris burn escapes and illegal debris burns. In addition, Air District offices have enforcement options not available to CAL FIRE Officers. The fines assessed help prevent future debris burn escapes and help to reduce the number of fire department responses to these types of fires.

As of 2023, CAL FIRE and the Office of the State Fire Marshall has implemented the online burn permit program allowing homeowners to go online to get the appropriate permit for the burning they would like to do. Although this is new process and there are several kinks to be worked out, this should allow more extensive education on proper burning practices and techniques which will hopefully lead to less escape debris piles.

3) **Undetermined -** Fires with an undetermined cause accounted for 27 fires, 13% of the total ignitions in the Unit. Undetermined caused fires resulted in approximately 50 acres being burned in the Unit. The 10-year average of acres burned for this cause class is 125 acres. Law Enforcement & Investigations Bureau staff continue to investigate these fires based on the information provided on the fire investigation reports.

   Continued hard work and dedication of the Unit's Law Enforcement & Investigations Staff and Company Officers who conduct thorough origin and cause investigations are imperative. We are bound by law and policy to investigate fires, and it is crucial fire investigations be conducted as completely and factually as possible. It is only through origin and cause investigations that true prevention can be administered.

4) **Vehicles** accounted for 25 fires, or 12% of the total ignitions in the Unit. Vehicle caused fires resulted in approximately 350 acres being burned within the Unit. The 10-year average of acres burned for vehicle caused fires is 157 acres. Vehicle caused fires are typically due to mechanical failures, usually within the exhaust system where hot particles are expelled into dry vegetation. Another common cause is vehicles dragging chains or other metallic objects. Continued public education on the importance of vehicle maintenance will reduce the number of ignitions. Because these fires are usually along a roadway, they are reported quickly allowing for a timely response.

5) **Other** causes accounted for 21 fires, or 10% of the total ignitions in the Unit. Formerly classified as Miscellaneous, Other caused fires resulted in approximately 89 acres being burned within the unit in 2024. The 10-year average of acres burned for Other caused fire is 159 acres. This classification includes causes such as structure fires, spontaneous combustion, fireplace ashes deposited in the wildland, barbequing, cooking fires, target shooting and fireworks. Target areas for these activities in AEU include the "Old Latrobe Road" and Meiss Road areas of eastern Sacramento County. Beatty Road and Powers Road; also known as "Heaven" in the SRA of El Dorado Hills, is an area where AEU has significant issues. Continued public education efforts, such as "One less spark, one less wildfire" and enforcement action by the Law Enforcement & Investigations Bureau when violations of law are identified will help reduce the number of ignitions.

6) **Power Generation** caused fires accounted for 18 fires, or 9% of the total ignitions in the Unit. Formerly classified as Electrical Power, Power Generation caused fires resulted in approximately 92 acres burned within the Unit. The 10-year average of acres burned for electrical caused fires is 480 acres. The Unit's Law Enforcement & Investigations staff as well as Defensible Space Inspectors continue to report PRC 4292 and PRC 4293 violations when they are observed to the appropriate utility company to mitigate the violation. Law Enforcement & Investigations Staff will document the violation on and LE-38a if the violation isn't addressed in a timely manner or may issue a citation dependent on the circumstances.

7) **Arson** accounted for 16 fires, or 8% of the total ignitions in the Unit. Arson caused fires burned approximately 2,048 acres in 2024. The 10-year average acres burned for arson caused fires is 716 acres. Arson caused fires are a good reason why investigating fires needs to be conducted quickly, thoroughly and with integrity.

Our continued good working relationships between all fire and law enforcement agencies within the Unit are aiding in successful apprehension and prosecution of arsonists. The importance of a thorough origin and cause investigation plays a key role in identifying suspicious fire patterns early. Apprehending and prosecuting arsonists is a team approach that depends on everyone.

The Unit also benefits from continuous, seven day a week, staffing of the Law Enforcement & Investigations Bureau during fire season and should continue throughout the year. Arson fires occur on a year-round basis and often go overlooked outside of declared fire season due to inadequate staffing. A trained investigator can quickly identify arson, collect valuable evidence, and work with local law enforcement to solve this crime.

8) **Natural** accounted for 4 fires, 2% of the total ignitions in the Unit. Lightning caused fires burned a little over .6 acres in 2024. The 10-year average of acres burned from lighting caused fires is 10 acres. Not much can be done to prevent or alter this category. In anticipation of predicted dry-lighting events, the Unit will activate its AEU Complex Incident Plan in order to reduce the number of acres burned due to lightning.

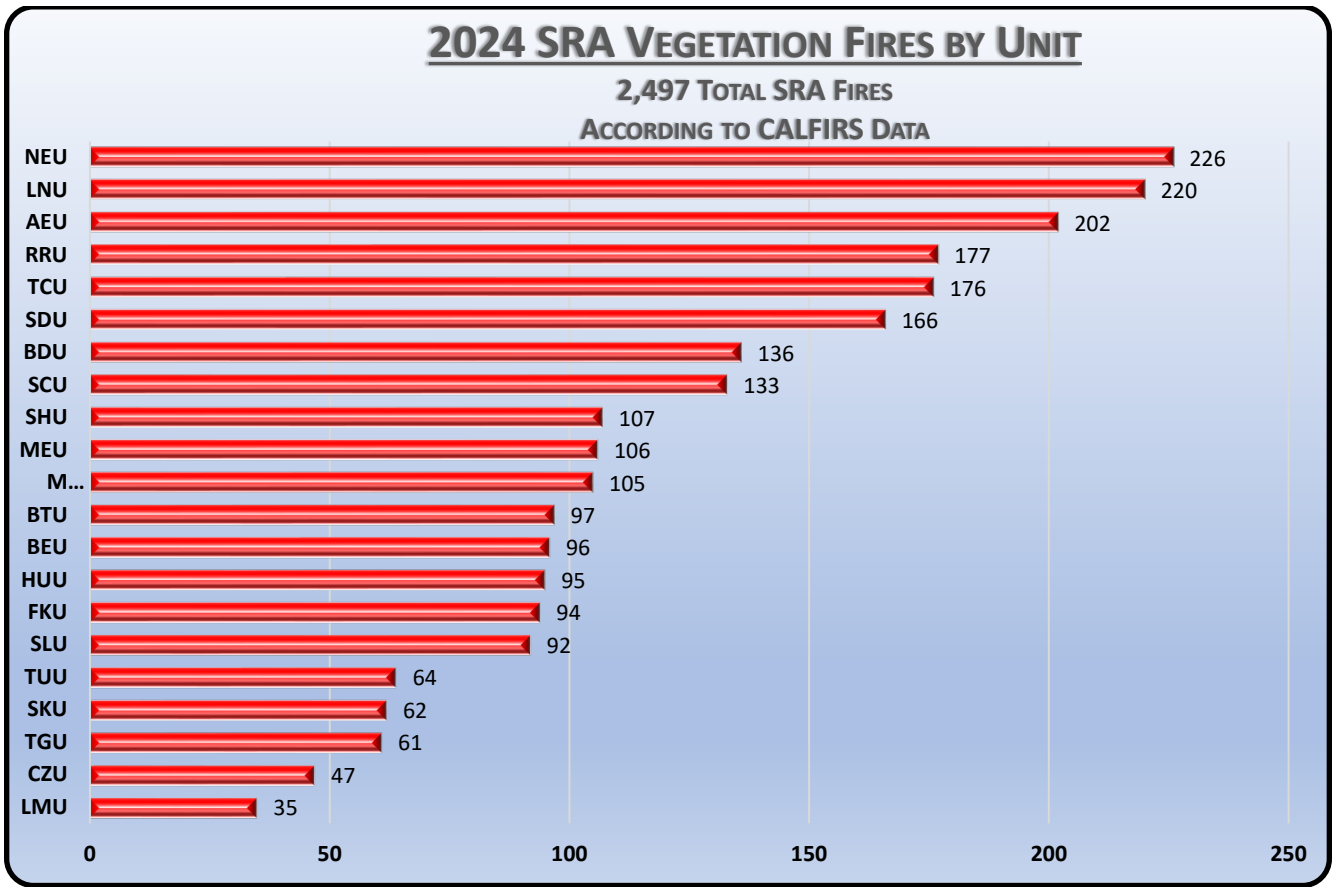
9) **Smoking** accounted for 4 fires, or 2% of the total ignitions in the Unit. Smoking caused fires burned less than .5 acre in 2024. The 10-year average of acres burned from Smoking caused fires is 81 acres. Continued public awareness and education will continue to reduce the number of smoking caused ignitions.

10) **Misuse of fire by Minor** accounted for 3 fires, or 2% of the ignitions in the Unit. Formerly classified as Playing with Fire, Misuse of Fire by a Minor caused fires burned less than ½ acre in 2024. The 10-year average of acres burned from Misuse of Fire by a Minor is 2 acres. CAL FIRE Officers, with the assistance of local agencies, continues to use the Youth Fire Setter Intervention Program when a juvenile is identified as being responsible for causing the fire.

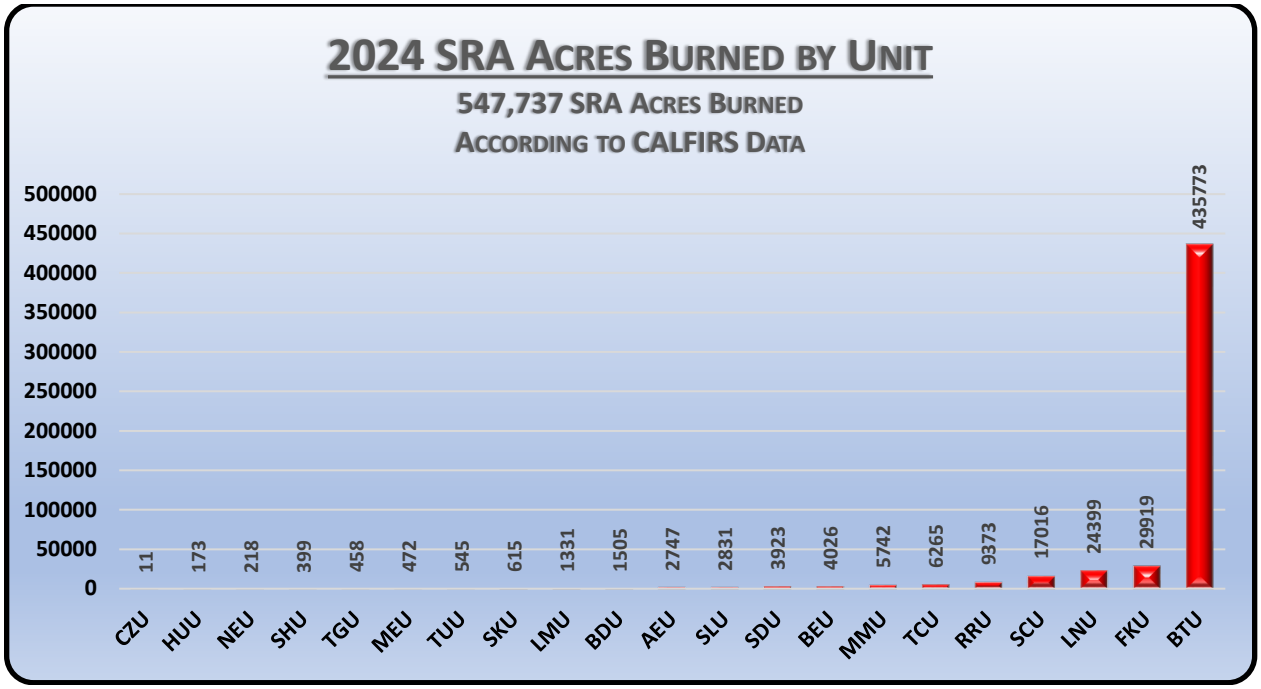
11) **Recreation/Ceremonial fires** accounted for 1 fire or 1% of the total ignitions in the Unit. Formerly classified as Campfire, Recreation/Ceremonial caused fires burned less than ¼ acre in 2024. The 10-year average of acres burned from campfire caused fires is 2 acres. Most of these campfires were located at transient camps. While fires in transient camps have dropped in AEU SRA over the past 5 years, in the LRA, they have increased. This is primarily due to the strict enforcement from the Law Enforcement & Investigations Bureau and the local Sheriff's Departments. Little to no action has been taken on illegal campfires in Placerville and South Lake Tahoe which has caused much of the population to move to these areas. With the close proximity to the SRA, transient campfires in the LRA directly affect the SRA. CAL FIRE Officers and local law enforcement, including the El Dorado County Sheriff Homeless Outreach Team (HOT) and the Amador County Sheriff Homeless of Amador Response Team (HART) continues to patrol these encampments to reduce the number of illegal campfires.

12) **Railroad** accounted for zero fires in 2024 or over the past 10 years. Amador County has one active commercial railroad in the western portion of the county. El Dorado has a railroad association which operates small railcars for historical tours on two small sections of railroad in the western end of the county.

13) **Under Investigation** is a category added in 2019 when Calfirs was introduced. This is a category set aside for CAL FIRE Officers for ongoing cases. In 2024, there were no fires left under investigation.



The above graph shows AEU SRA Ignitions compared to all CAL FIRE Unit's SRA Ignitions. This data is collected from CALFIRS. Unlike previous years, illegal debris fires are not included in this total. With a total of 202 SRA ignitions for 2024, AEU had the 3rd highest number of ignitions behind NEU and LNU.



The above graph shows the Statewide SRA acres burned according to CALFIRS data. In 2024, AEU had 2,747 acres burned with the largest fire being the Crozier Fire on August 6th at 1,938 acres. The 10-year average is 2,172 acres.

Law Enforcement & Investigations Bureau

With recent movement, The Amador-El Dorado Unit currently has 6 active Peace Officers (PC 830.2(g)) with 1 more scheduled to attend the 2026 Peace Officers Standardized Training (POST) Regular Basic Course (RBC). Once completed with RBC, the recruit will undergo a field training program. Most recruits complete the field training program by October at which point they are fully qualified to be a solo officer. Current Peace Officer assignments are as follows:

Fire Prevention, Law Enforcement & Investigations Bureau Staffing:

Battalion Chief - 1:
- -B2720

Fire Captain Specialist - 4:
- -P2721
- -P2722
- -P2723
- -P2724

Forester I - 1:
- -F2791

The Unit will continue to utilize its Peace Officers for general Law Enforcement duties & investigations, Fire Prevention efforts, Forest Practice Enforcement, Civil Cost Recovery, Board of Forestry and Fire Protection Security Detail, Internal Affairs Investigations, Serious Accident Review Teams, Out of Unit Assignments, various Fire Prevention and Law Enforcement workgroups, and training assignments/cadres.

The availability of all 6 Unit Peace Officers on a routine and consistent basis is limited by current Peace Officer assignments within the Unit. The amount of Peace Officers in the Unit has declined from 12 in 2008 to 6 in 2025.

Due to the reduced number of Peace Officers both statewide and within the Unit, it is anticipated that there will be greater demand on existing Peace Officers for Fire Investigations, the Field Training Program, Cadres, Workgroups, Law Enforcement assignments, Serious Accident Review Team deployments and Administrative Investigations.

2024 Law Enforcement & Investigations Bureau Statistics:

- AEU Law Enforcement & Investigations Bureau officers responded to 382 calls in 2024. Also in 2024, CAL FIRE ECC's added several CAD Law Enforcement status codes in order to track the number and types of calls we respond to.
    - Below is a breakdown of the calls AEU Law Enforcement staff responded to:
        - 11 Structure Fires
        - 145 Vegetation Fires
        - 47 Miscellaneous Fires
        - 4 Public Assists
        - 1 Traffic Collision
        - 7 Medical
        - 164 Law Enforcement
        - 3 Other type
- Below is a summary of the results of these calls:
    - 3 Felony Arrests were made within the Unit related to arson type fires
    - 3 Felony Arrests were made within the Unit related to other crimes
    - 8 Citations were issued
    - 5 District Attorney complaints were filed
    - Approximately 70 LE-38(a)'s were issued

2024 Law Enforcement & Investigations Bureau Cadres/Workgroups:

1) CAL FIRE Field Training Program
2) FI-210 cadre
3) Fire Prevention Advisory Committee
4) Sacramento - Sierra Regional Arson Task Force
5) Sacramento Regional - High Tech Crimes Task Force
6) El Dorado County Fire Arson Task Force
7) Amador County Arson Task Force
8) Regular Basic POST Academy
9) CAL FIRE Firearms cadre
10) CAL FIRE Arrest Control/Defensive Tactics cadre
11) CAL FIRE Less than Lethal Weapons cadre
12) CAL FIRE Defensible Space Collector App
13) CALFIRS Working Group

Administrative Investigations:

Complex administrative investigations should be routed through the CAL FIRE Professional Standards Program (PSP). However, less complex investigations should be done by the appropriate supervisor with a notification made to the Units Administrative Officer. In cases where the nature or complexity of the investigation is not clear, unit personnel should contact the CAL FIRE Professional Standards Unit through the Unit Administrative Officer (or directly if the situation warrants).

Fire Prevention, Law Enforcement & Investigations Bureau 2024 Summary:

In 2024, the Unit successfully engaged in all aspects of Fire Prevention including public education, engineering, law enforcement and volunteerism. In addition, the Law Enforcement & Investigations Bureau was able to support out-of-unit assignments while maintaining seven-day a week prevention coverage during fire season within the Unit. The AEU Law Enforcement & Investigations Bureau was successful in preventing fires where we usually have issues due to active and consistent patrolling. Prevention of these fires continues to be a team effort attributed to fire prevention patrol, public education, and fire suppression efforts in the Unit. In recent years the transient population in the Unit has been on the rise as well as transient related fires. The Bureau continues to work with the El Dorado County Sheriffs Homeless Outreach Team (HOT) and the recently developed Amador Sheriffs Homeless Amador React Team (HART) to educate the transient population on fire safety and at times enforce the law when appropriate.

During the course of fire prevention patrol in the Unit, Bureau personnel observed multiple illegal fires, successfully extinguishing them and holding those responsible accountable, potentially preventing several large damaging wildfires from occurring.

With several cases still pending for the Amador/El Dorado Unit Law Enforcement & Investigations Bureau, 2024 was a successful year for prosecution of arsonists. In January 2025, Jason Robinette was found guilty of 2 counts of arson for the Crozier and Mosquito Fires of 2024. While this case moved extremely fast through the legal process, the 2022 Electra Fire was quite different. The AEU Law Enforcement & Investigations Bureau received information regarding the party responsible. With this information, the Bureau worked quickly as a team to present the case, get a warrant, and arrest Danny Killion in a homeless camp in Yuba City for the fire. He was ultimately found guilty in April 2025 of reckless Arson. The Electra Fire case is a good example of how long a case can go on and shows the importance of good and in-depth investigations.

It’s the intent of the Amador-El Dorado Unit in 2024 to continue to actively seek ways to reduce unwanted fires, aggressively pursue criminal or civil action against violators of forest and fire laws, enhance the law enforcement skills of all of its Officers through on-going training, increase the visibility of CAL FIRE through media outlets, engage local jurisdictions in land use policy and planning decisions and continue to provide support to the Regions and Sacramento on out-of-unit assignments. The Unit plans to build on past successes while seeking ways to improve processes internal to the Unit.

Defensible Space Inspection Plan

In 2024, a total of 12,019 defensible space inspections were conducted in the Amador-El Dorado Unit. CAL FIRE Forestry Aide & Forestry Technician Defensible Space Inspectors performed 5,581 inspections. CAL FIRE engine companies conducted 2,516 inspections. CAL FIRE totaled 8,097 inspections within AEU state responsibility area. Cooperators performed 3,922 inspections: County of El Dorado OWPR, El Dorado County Fire, El Dorado Hills Fire, Noth Tahoe Fire, Lake Valley Fire and South Lake Tahoe Fire. These inspections were under Public Resource Code 4291 and California Civil Code 1102.19 related to real estate transactions. Qualified Entity Assessments, Public Resource Code 4291.5, were conducted by the El Dorado Fire Safe Council and California Conservation Corps totaling 161 assessments.

The goals of the Unit's Defensible Space Program are as follows:

1) Identify Defensible Space Areas within the Unit where inspections will occur.

2) Provide a margin of safety for firefighters and the public.

3) Educate residents and developers regarding their responsibility for defensible space.

4) Ensure structures have some basic level of self-protection.

5) Mitigate wildland fire losses and resource damage.

6) Increase the survivability of a home or development.

7) Provide a point of attack for a wildland fire.

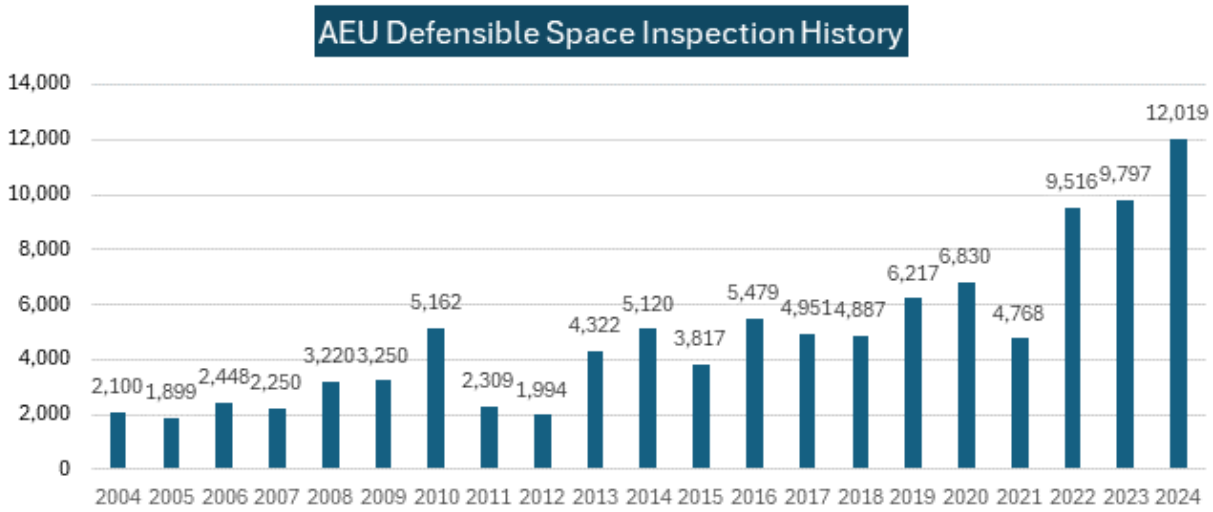
8) Provide CAL FIRE personnel greater awareness of response areas within the Unit where inspections are occurring.

9) Work closely with Local Fire Districts and Fire Safe Councils to enhance communication and work being done throughout the Unit.

10) Train and certify Fire Safe Council Qualified Entity Assessors.

11) During fire season conduct PRC4292/4293/LE-38(a) utility inspections.

Below is a historical snapshot of defensible space inspections since 2006. It is important to note that in the years 2005-2006, most inspections were completed by Volunteers-In-Prevention (VIP's) and Fire Safe Councils. It was not until 2007 that CAL FIRE personnel began to actively conduct inspections on a consistent, Unit-wide basis.



Defensible Space Inspection Numbers by Year

Amador-El Dorado Unit

Year	Inspections	Completed By	Staffing
2004	2,100	Majority VIPs, FSCs	3-0 Staffing
2005	1,899	Majority VIPs, FSCs	3-0 Staffing
2006	2,448	Majority VIPs, FSCs	3-0 Staffing
2007	2,250	CAL FIRE	3-0 Staffing
2008	3,220	CAL FIRE	4-0 Staffing
2009	3,250	CAL FIRE	4-0 Staffing
2010	5,162	CAL FIRE	5 FF1's Hired April 1st, 4-0 staffing
2011	2,309	CAL FIRE	3-0 Staffing
2012	1,994	CAL FIRE	4 Forestry Aides hired mid-July, 3-0 Staffing
2013	4,322	CAL FIRE	4 FF1s/4 FAs hired in May, 3-0 Staffing
2014	5,120	CAL FIRE	4 FAs hired in April, 3-0 Staffing
2015	3,817	CAL FIRE	5 FAs hired in April, 3-0 Staffing
2016	5,479	CAL FIRE	5 FAs and Surge Capacity FFs, 3-0 Staffing
2017	4,951	CAL FIRE	4 FAs, 3-0 Staffing
2018	4,887	CAL FIRE	5 FAs, 3-0 Staffing
2019	6,217	CAL FIRE	3 FAs, 3-0 Staffing
2020	6,830	CAL FIRE	5 FAs, 3-0 Staffing
2021	4,768	CAL FIRE	4 FAs 3-0 Staffing
2022	9,516	CAL FIRE	1 Forestry Technician, 4 FAs, 3-0 Staffing
2023	9,797	CAL FIRE, Cooperators	2 FTs, 2 FAs, 3-0 Staffing
2024	12,019	CAL FIRE, Cooperators	2 FTs, 3 FAs, 3-0 Staffing

Defensible space is the area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire prevention practices and measures are implemented, providing the key point of defense from an encroaching wildfire or an escaping structure fire. Pursuant to Public Resources Code 4291, residents are required to maintain defensible space of 100 feet around their structure, but not beyond their property line. The amount of fuel modification required factors in the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels are required to be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure.

Information and Education Program

Youth Fire Setter Intervention and Education Program (YFS)

The Unit's Youth Fire Setter Intervention and Education Program is coordinated by the Fire Prevention Bureau Chief. The Fire Prevention Bureau manages cases that originate from CAL FIRE Prevention personnel, CAL FIRE Battalion Chiefs or Engine Company Officers, local and federal fire agencies, local law enforcement, the Probation Department and the District Attorney's Office. The program includes the following:

1) Assessment of the juvenile for future fire setting.
2) Educate the juvenile and family about fire setting and fire safety.
3) Make recommendations to County Probation (Probation/District Attorney's Office), Social Services, Mental Health, Child Protective Services, and private mental health providers.

Volunteer in Prevention Program

The Unit's Volunteers in Prevention (VIP) program staffs the Pilot Peak and Mt. Zion Lookouts and occasionally provides support for public information events. This program entails recruiting, training, coordinating and supervising activities of Unit VIPs and record keeping (VIP Database, CALATERS, etc.) associated with the program. The VIP Program is overseen primarily at the Battalion level.

Local Land Use Planning and the SRA Fire Safe Regulations

California Senate Bill 1075, also known as the State Responsibility Area Fire Protection Act, was signed into law in 1987. The bill was introduced in response to a series of large wildfires that caused significant property damage and loss of life in California. It established a system of fire protection in State Responsibility Areas (SRAs), which are areas where the state has responsibility for fire protection and required the development of fire safe regulations to reduce the risk of wildfire.

As a result of Senate Bill 1075, the California Department of Forestry and Fire Protection (CAL FIRE) developed the State Minimum Fire Safe Regulations, which were first implemented in 1991 under PRC 4290. These regulations established minimum requirements for defensible space around homes and structures in SRAs, as well as standards for road access and water supply for firefighting. The regulations have been periodically updated and expanded over the years to include additional requirements for new development, vegetation management, and other fire safety measures. Today, the State Minimum Fire Safe Regulations continue to be a critical component of CAL FIRE's efforts to reduce the risk of wildfire and protect lives and property in California's wildland-urban interface areas. The latest update to the Fire Safe Regulations was adopted and implemented on April 1, 2023.

PRC 4290 requires compliance with California State Minimum Fire Safe CCR 1270 regulations. These regulations are primarily triggered by permit applications for purposes other than limited remodels, such as submitting a tentative subdivision map, tentative parcel map, special use permit, or constructing a road. They do not supersede existing local regulations that are equally or more stringent than state regulations. These regulations include requirements for access, addressing, water supply, and fuel breaks. CAL FIRE AEU works with local fire agencies, applicants, cities, and counties to ensure compliance with these regulations.

EXHIBITS: AMADOR – EL DORADO CHARTS/MAPS

Exhibit: AEU Unit Statistics

Amador-El Dorado Unit Statistics

Counties **	Acres
Alpine	474,266
Amador	387,826
El Dorado	1,144,948
Sacramento	636,087
San Joaquin	24,921
Total	**2,668,048**

**Within AEU Admin boundary*

*Mar 2025

Unit/Boundary	Acres
AEU	**2,668,047**
Bat 1	583,238
Bat 2	357,726
Bat 3	282,349
Bat 4	650,425
Bat 5	4,328
Bat 6	790,003

*Oct 2024

DPA	Acres
Local	546,287
State	947,911
Federal	1,173,829
Total	**2,668,027**

*April 2025

DPA - CAL FIRE	Acres
Alpine	23,006
Amador	293,657
El Dorado	492,796
Sacramento	113,574
San Joaquin	24,877
Total	**947,910**

*April 2025

SRA	Acres
Local	574422
State	1,007,651
Federal	1085973
Total	**2,668,046**

*April 2025

SRA - CAL FIRE	Acres
Alpine	34,374
Amador	286,808
El Dorado	548,068
Sacramento	113,524
San Joaquin	24,877
Total	**1,007,651**

*April 2025

FHSZ	Acres
SRA FHSZ Total	1,009,097
Moderate	152,675
High	253,070
Very High	603,352

*Oct 2024

Project Planning Divisions	Acres
North	945,271
South	932,774
East	790,003
Total	**2,668,048**

*April 2025

	Acres (% of county FHSZ acres)						
FHSZ (County)	**Moderate**	**%**	**High**	**%**	**Very High**	**%**	**Total**
Alpine	5,679	16.54%	14,497	42.22%	14,164	41.25%	34,340
Amador	16,142	5.61%	103,463	35.95%	168,220	58.45%	287,825
El Dorado	19,582	3.57%	109,327	19.93%	419,622	76.50%	548,531
Sacramento	86,421	76.13%	25,757	22.69%	1,347	1.19%	113,525
San Joaquin	24851	99.89%	27	0.11%	0	0.00%	24,878
Total	**152,675**		**253,071**		**603,353**		**1,009,099**
							*April 2025

SRA FHSZ (High + Very High) percentages for each AEU Battalion:

Batt 1: H/VH 88%
Batt 2: H/VH 98%
Batt 3: H/VH 98%
Batt 4: H/VH 65%
Batt 5: H/VH 80%
Batt 6: H/VH 91%
Unit H/VH Average: 87.6%

Acres calculated in ArcPro using FRAP data

*Note differences in acreage totals due to polygon irregularities

Figure A: Unit Map

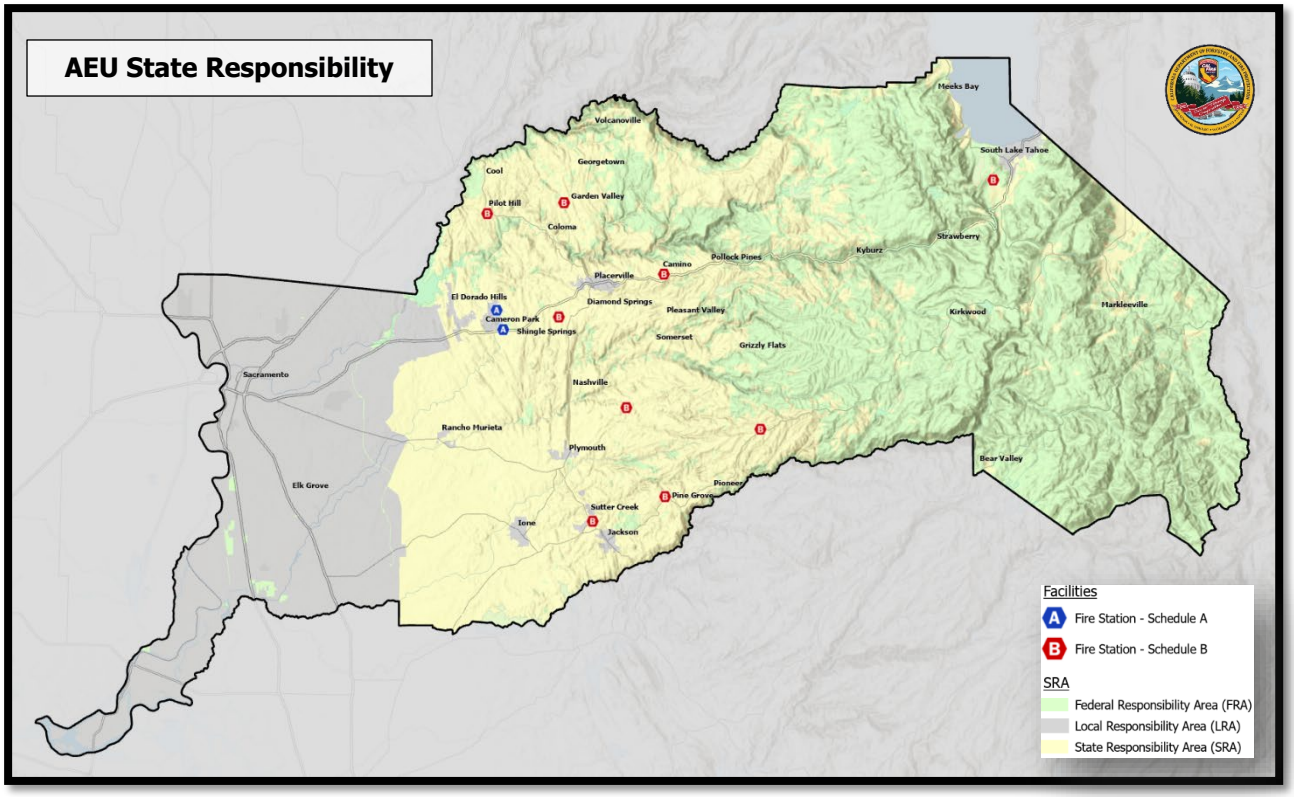
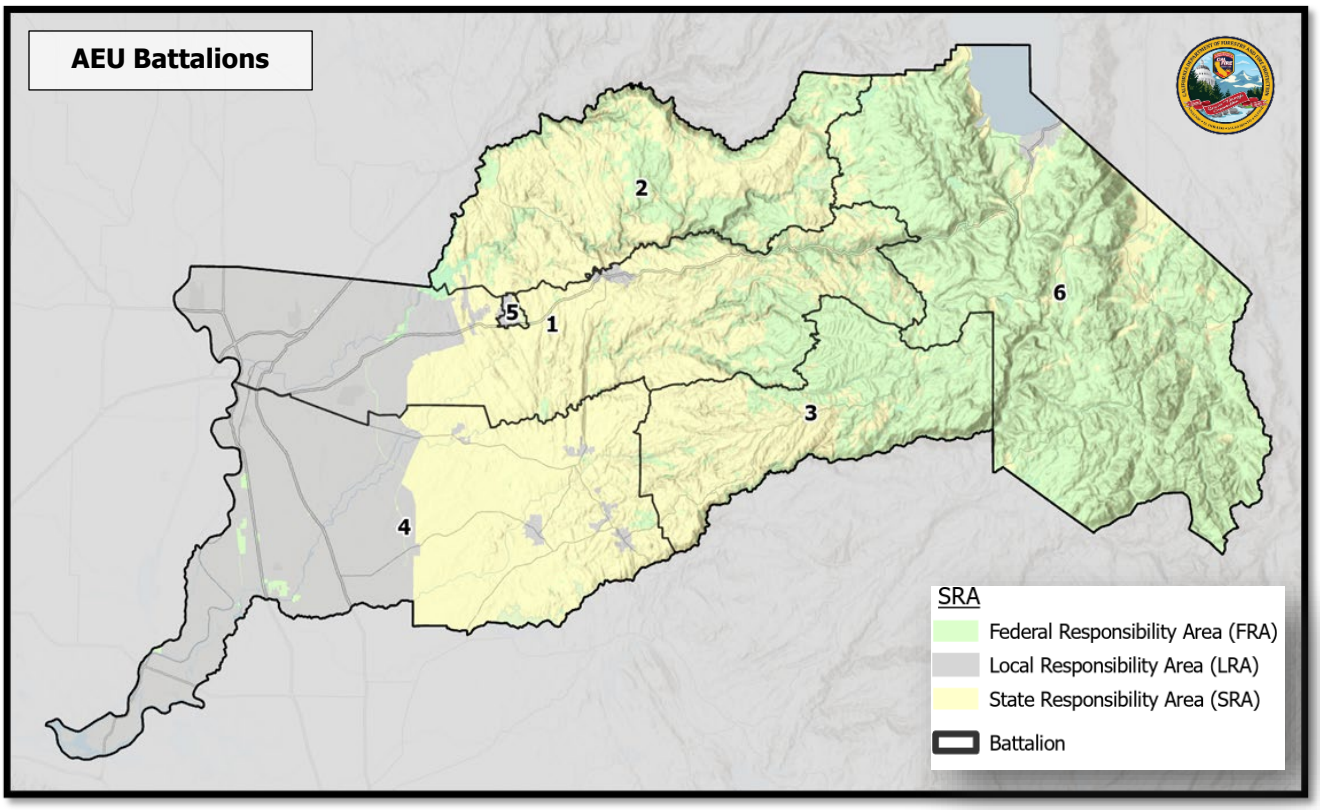
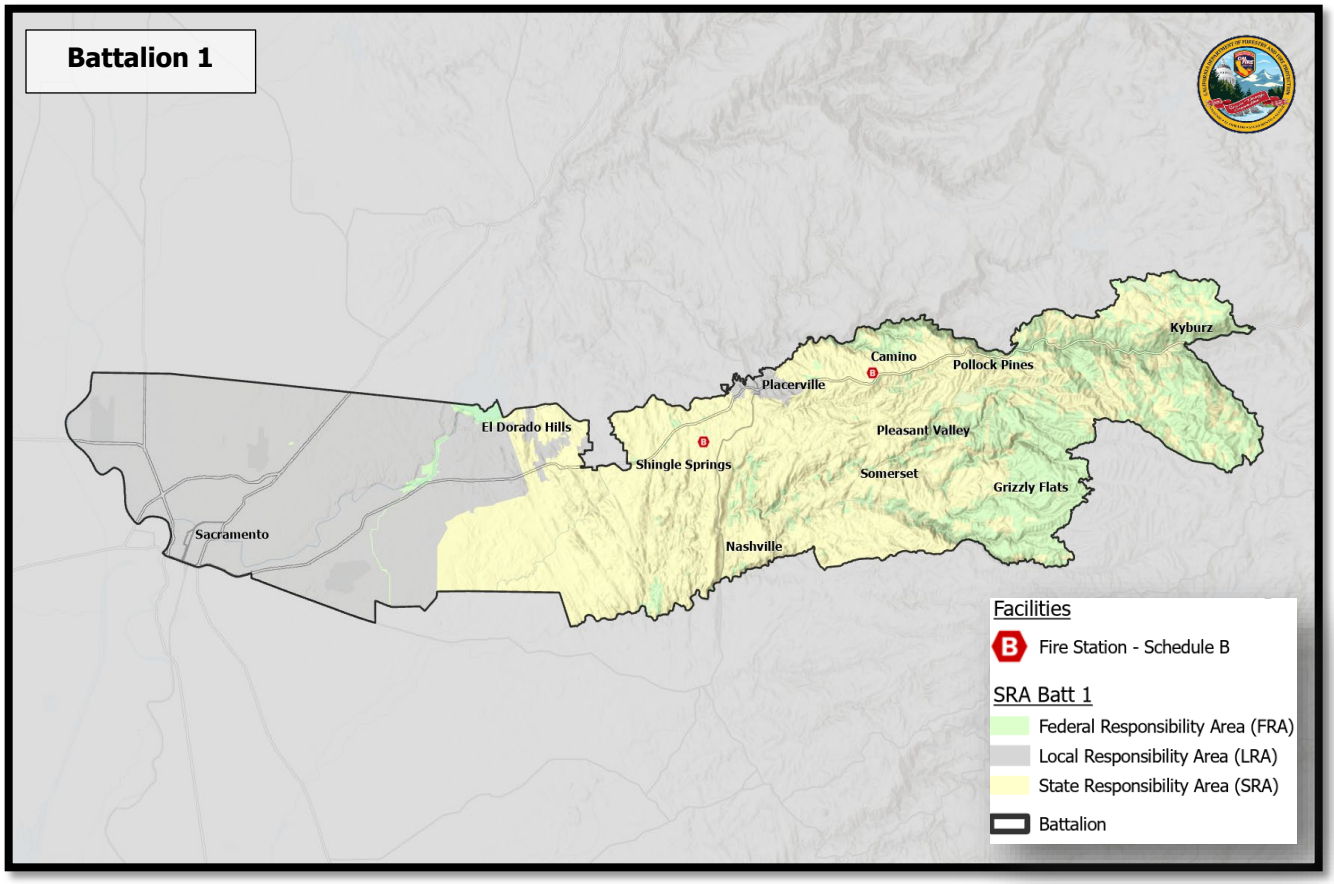
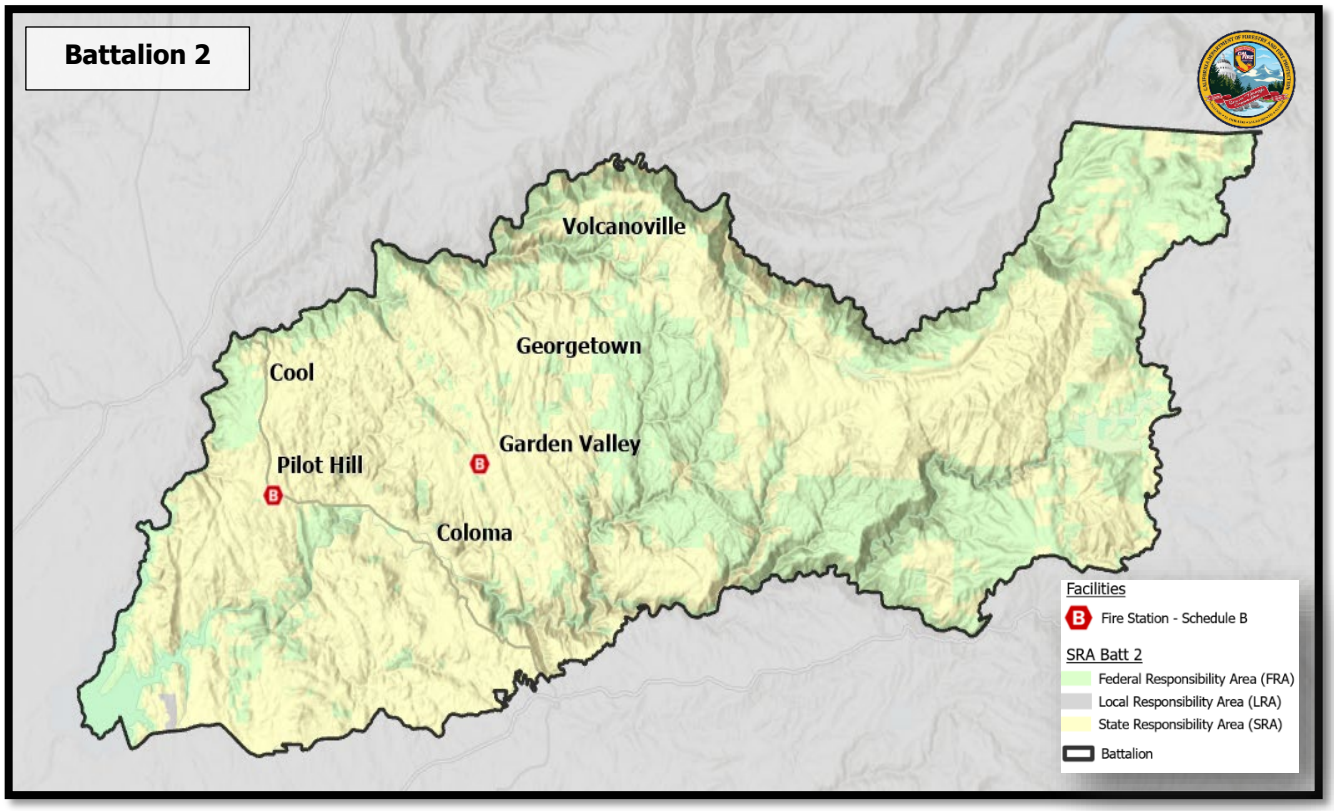
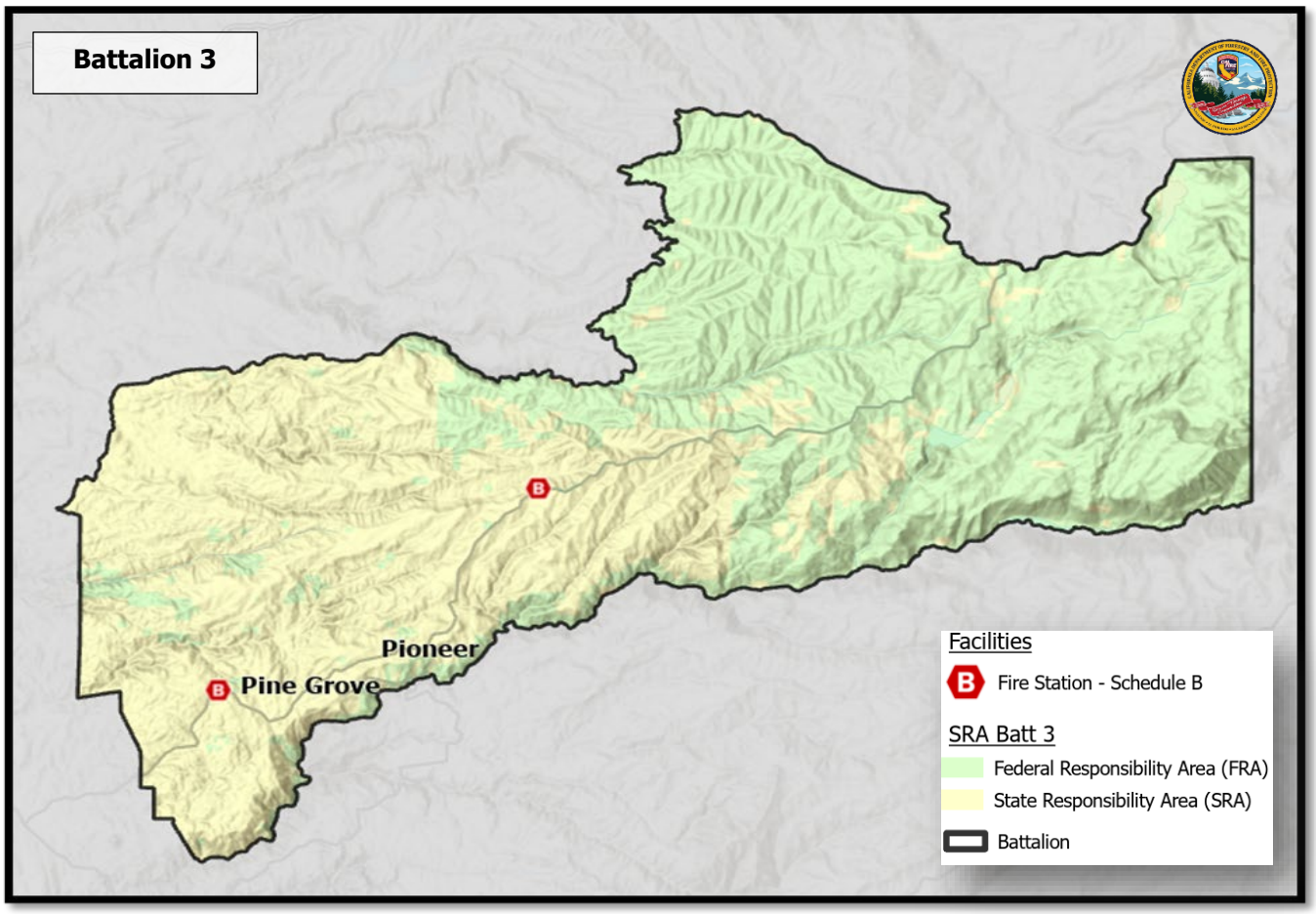


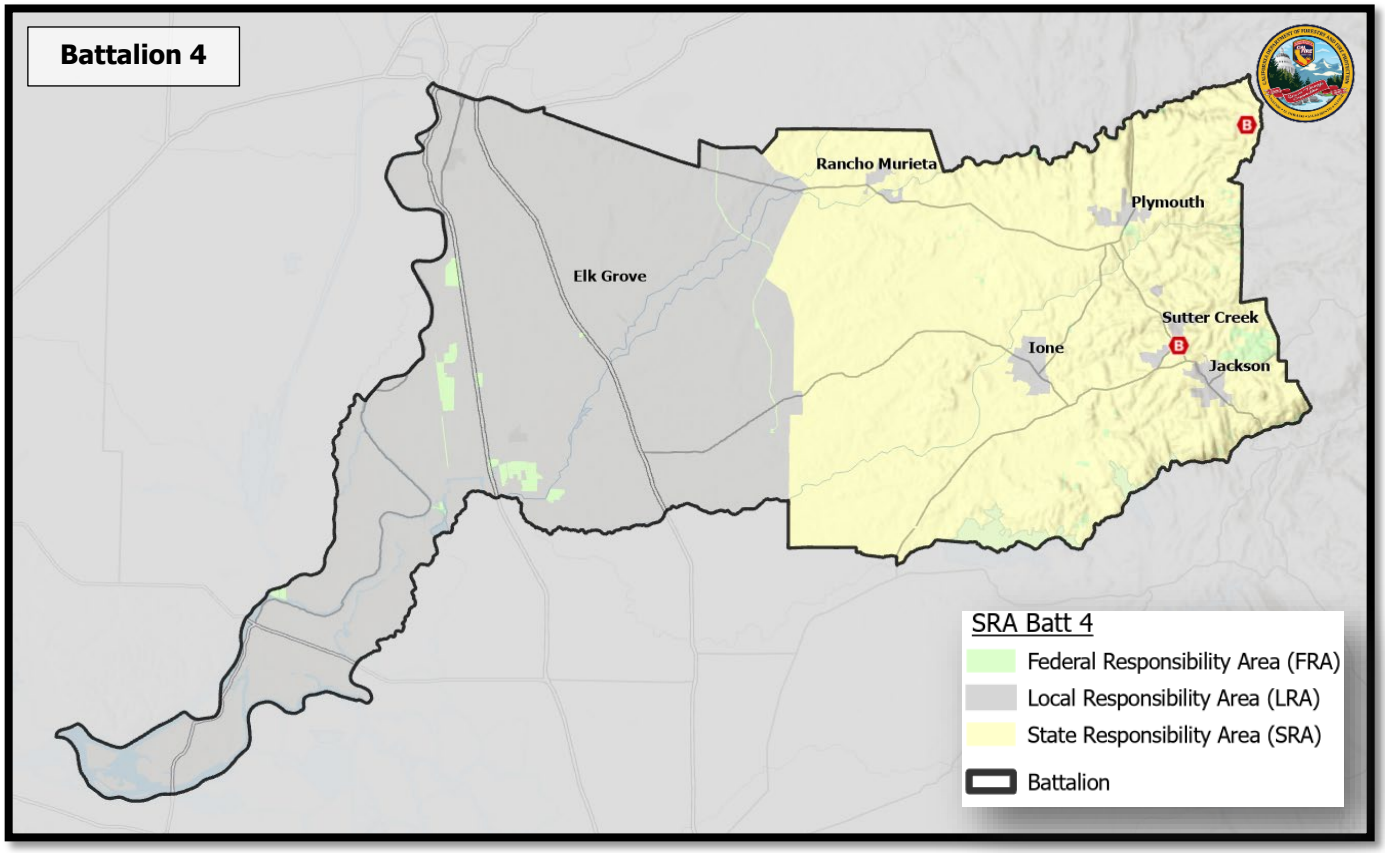
Figure B: Battalion Maps

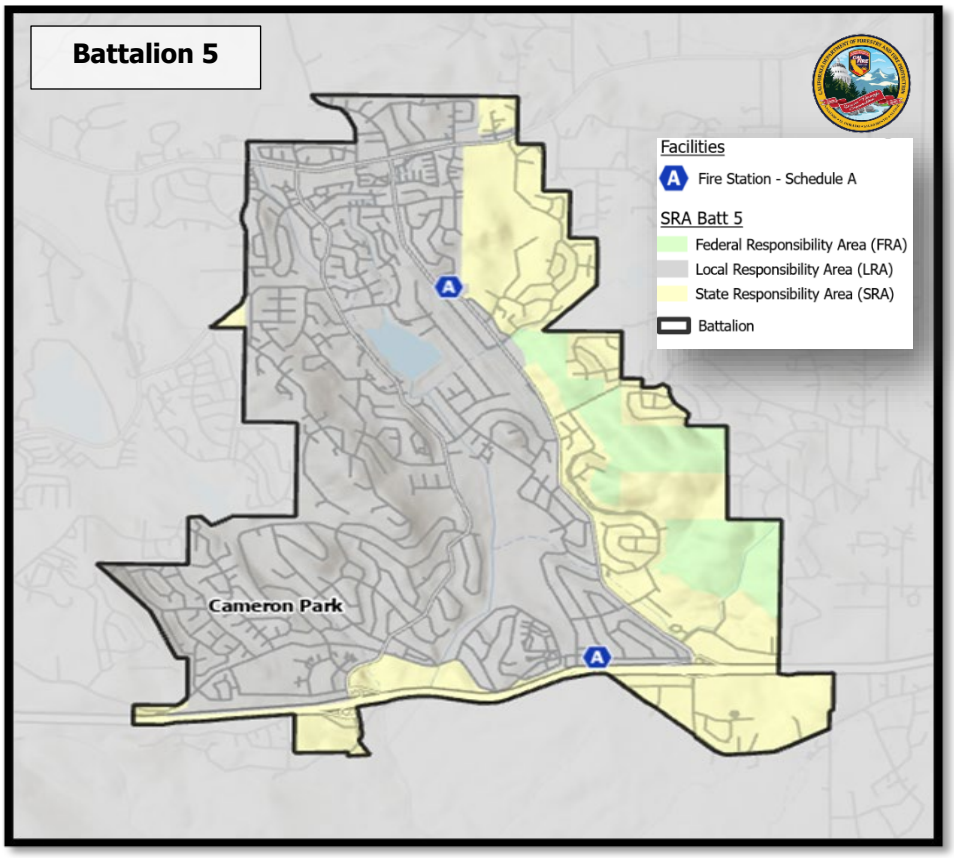



Battalion 1
Kyburz
Camino
Pollock Pines
Placerville
El Dorado Hills
Pleasant Valley
Shingle Springs
Somerset
Grizzly Flats
Sacramento
Nashville
Facilities
Fire Station - Schedule B
SRA Batt 1
Federal Responsibility Area (FRA)
Local Responsibility Area (LRA)
State Responsibility Area (SRA)
Battalion


Battalion 2
Volcanoville
Georgetown
Cool
Garden Valley
Pilot Hill
Coloma
Facilities
Fire Station - Schedule B
SRA Batt 2
Federal Responsibility Area (FRA)
Local Responsibility Area (LRA)
State Responsibility Area (SRA)
Battalion


Battalion 3
Pioneer
Pine Grove
Facilities
Fire Station - Schedule B
SRA Batt 3
Federal Responsibility Area (FRA)
State Responsibility Area (SRA)
Battalion


Battalion 4
Rancho Murieta
Plymouth
Elk Grove
Sutter Creek
Ione
Jackson
SRA Batt 4
Federal Responsibility Area (FRA)
Local Responsibility Area (LRA)
State Responsibility Area (SRA)
Battalion


Battalion 5
Facilities
Fire Station - Schedule A
SRA Batt 5
Federal Responsibility Area (FRA)
Local Responsibility Area (LRA)
State Responsibility Area (SRA)
Battalion
Cameron Park

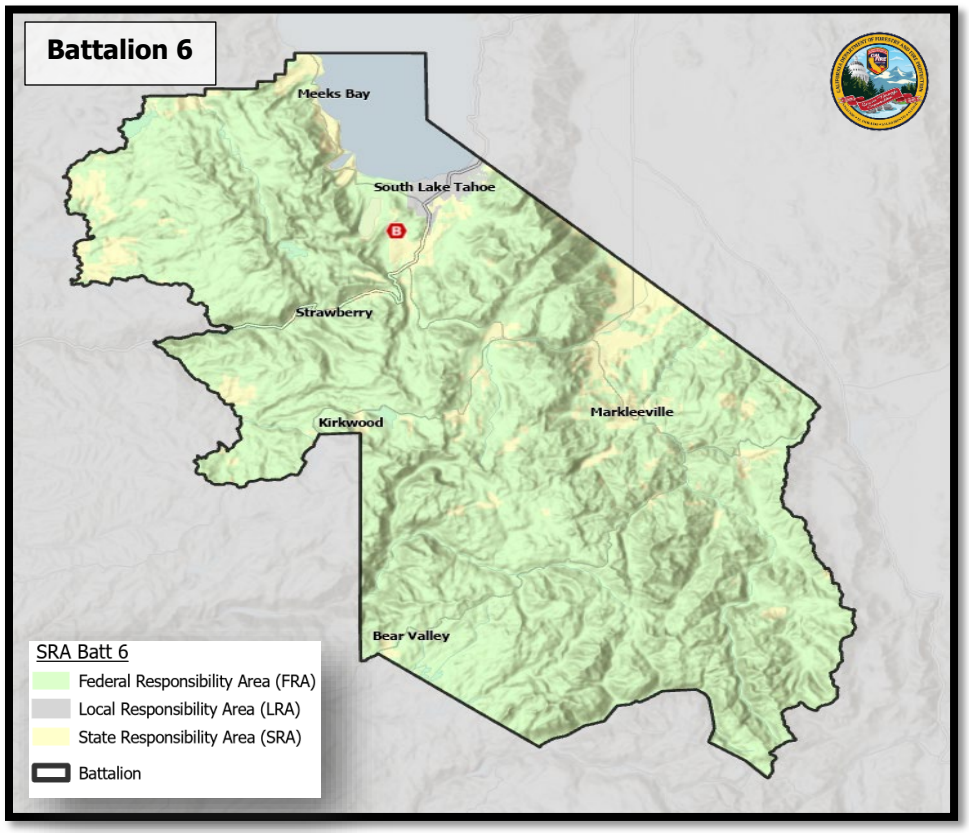
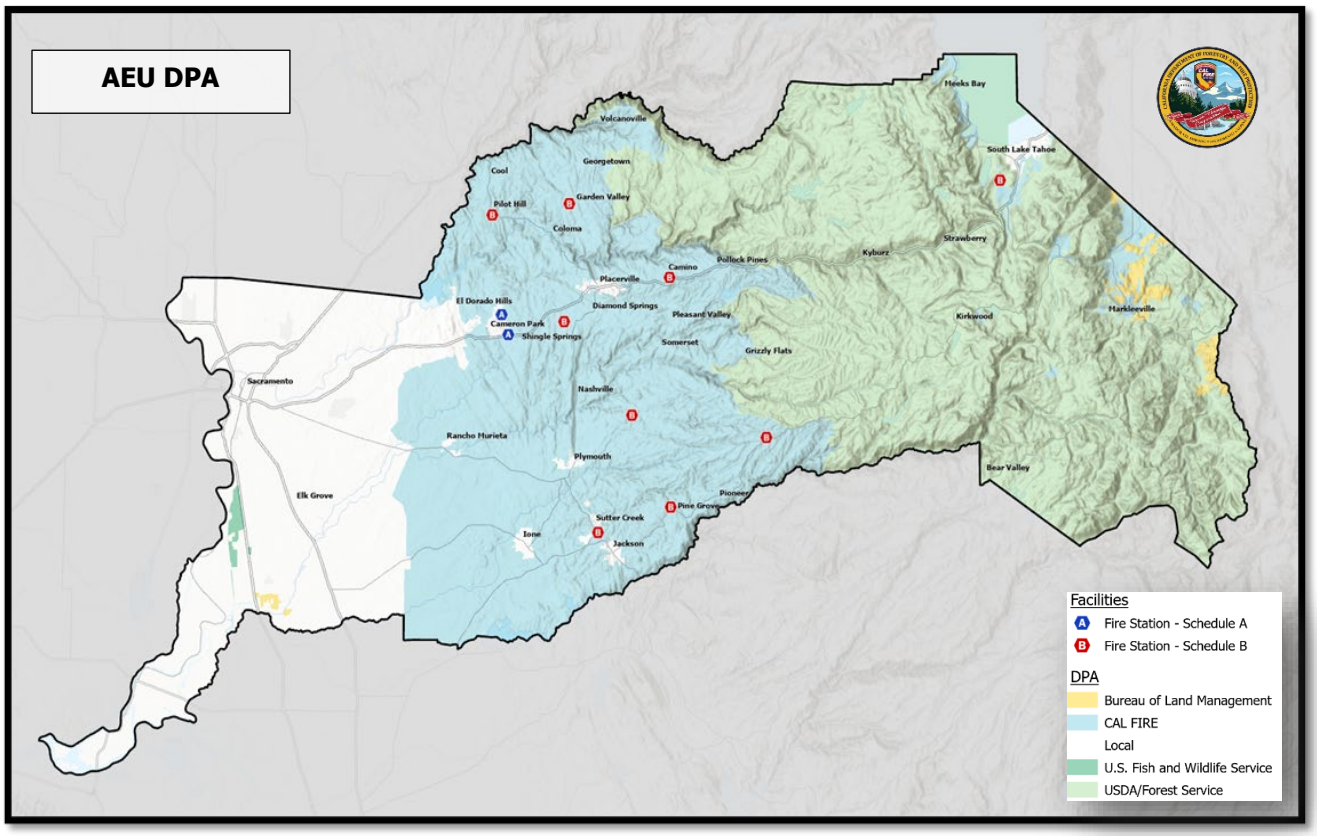

Battalion 6
Meeks Bay
South Lake Tahoe
Strawberry
Kirkwood
Markleeville
Bear Valley
SRA Batt 6
Federal Responsibility Area (FRA)
Local Responsibility Area (LRA)
State Responsibility Area (SRA)
Battalion

Figure C: Unit DPA Map



SUPPLEMENTAL TECHNICAL REPORT

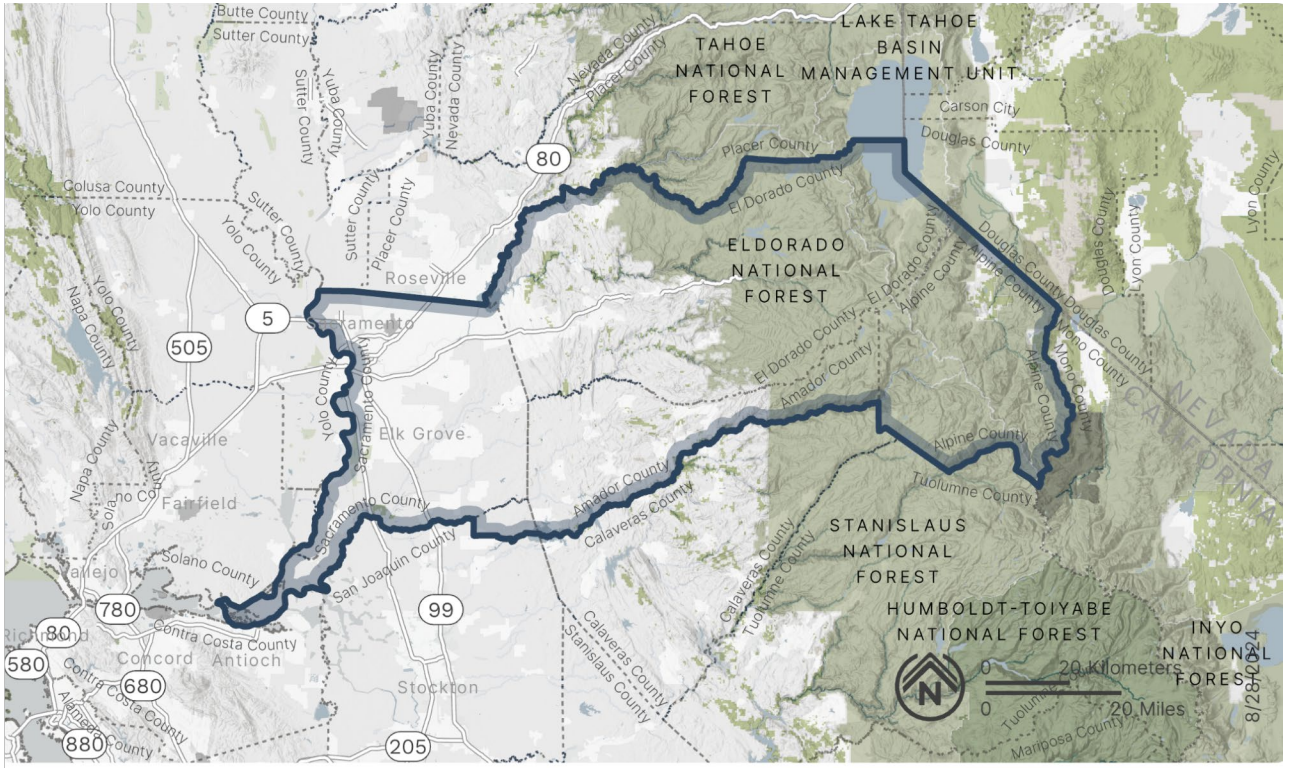
CAL FIRE Amador - El Dorado Unit

November 2024

SUPPLEMENTAL TECHNICAL REPORT

Report Overview

The supplemental report is intended to provide landscape-specific information regarding data curation, model development and parameterization, treatment opportunity identification and other analyses that are unique to a given landscape and therefore not covered in the Product Guide. This technical report covers the data and analysis for 2024, across CAL FIRE's Amador El Dorado Unit.



Map 1 - 2024 Area of Interest for the CAL FIRE Amador-El Dorado unit (navy outline).

Land Resume

Land managers and designations overview for the Amador El Dorado Unit. Please refer to the Product Guide for information about data curation and processing and the Stewardship Atlas for full ownership and landscape designation information. Please refer to the Product Guide for information about data curation and processing and the Stewardship Atlas for full ownership and landscape designation information.

Table 1 - Land Resume Categories derived from PAD□US □U.S. Geological Survey, 2022□

Land Resume

Administration Categories

Administration	Acreage	Data Source
US Forest Service*	1,210,767	Source Field: Manager Name - Forest Service □USFS□
Bureau of Land Management*	81,929	Source Field: Manager Name - Bureau of Land Management □BLM□
Other Federal Land*	80,184	Parcels where PAD□US Manager type is “Federal” □FED□ and Manager Name does match any of the categories shown in this table.
Local Government*	58,365	Source Field: Manager Type - Local Government □LOC□ or Regional Agency Special District □DIST□
Non-Governmental Organization*	45,402	Source Field: Manager Type: Non-Governmental Organization □NGO□
State Fish and Wildlife*	43,074	Source Field: Manager Name - State Fish and Wildlife □SFW□
State Parks and Recreation*	32,707	Source Field: Manager Name - State Parks and Recreation □SPR□
American Indian Lands*	24,184	Source Field: Manager Name - American Indian Lands □TRIB□
Other State Land*	19,717	Parcels where PAD□US Manager type is “State” □STAT□ and Manager Name does match any of the categories shown in this table.
US Fish and Wildlife Service*	5,837	Source Field: Manager Name - U.S. Fish & Wildlife Service □FWS□
State Department of Conservation*	1,934	Source Field: Manager Name - State Department of Conservation □SDC□
National Park Service*	0	Source Field: Manager Name - National Park Service □NPS□

Land Resume

Standard Designation Categories

Designation	Acreage	Data Source

Wilderness Area*	339,328	Source Field: Designation Types - Wilderness Area, State Wilderness Area, Wilderness Study Area

Custom Segmentation

Category	Data Source
Project/Treatment Boundaries	CAL FIRE on behalf of Amador RCD, CALMAPPER, El Dorado Georgetown Divide RCD. Provided via email by Captain Arend Tosti July 2024.

☐Standard Land Resume category.

Landscape-Specific SARAs

Strategic Areas, Resources and Assets specific to Amador El Dorado Unit. Please refer to the Product Guide for information about data curation (Section 2 - Data Curation), processing and use. Refer to Section 3 - Strategic Areas, Resources & Assets for a description of base value score assignments.

Table 2 - A list of SARAs including data source information, whether or not treatment should be avoided in the SARA buffer (Section 3 - Strategic Areas, Resources & Assets). Please see each SARA's Fact Sheet for detailed information about each SARA. Note that all base SARAs may not be present in a given landscape. If the SARA is not present in a given planning area, it will not show in the platform.

Strategic Area, Resources & Assets			
SARA Name	**Data Source**	**Avoid Treatment**	**Departure Metric**
Above Ground Water Delivery ☐Wooden☐	Amador Water Agency ☐AWA☐ ☐2024☐AWA Export 071524 [dataset]. Provided via email by Lucas Carthew July 2024. El Dorado Irrigation District ☐EID☐ ☐2024☐EID Assets [dataset]. Provided via email by Chief Jeff Hoag May 2024.	-	-

Strategic Area, Resources & Assets			
SARA Name	**Data Source**	**Avoid Treatment**	**Departure Metric**

Aboveground Live Biomass	Saatchi, S. S., Harris, N. L., Brown, S., Lefsky, M., Mitchard, E. T. A., Salas, W., Zutta, B. R., Buermann, W., Lewis, S. L., Hagen, S., Petrova, S., White, L., Silman, M., & Morel, A. (2011). *Benchmark map of forest carbon stocks in tropical regions across three continents*. Proceedings of the National Academy of Sciences, 108(24), 9899–9904. https://doi.org/10.1073/pnas.1019576108 Xu, L., Saatchi, S. S., Yang, Y., Yu, Y., Pongratz, J., Bloom, A. A., Bowman, K., Worden, J., Liu, J., Yin, Y., Domke, G., McRoberts, R. E., Woodall, C., Nabuurs, G.-J., de-Miguel, S., Keller, M., Harris, N., Maxwell, S., & Schimel, D. (2021). *Changes in global terrestrial live biomass over the 21st century*. Science Advances, 7(27), eabe9829. https://doi.org/10.1126/sciadv.abe9829	-	n/a, continuous
Aspen Highly Suitable Habitat	Riley, Karin L.; Grenfell, Isaac C.; Finney, Mark A.; Shaw, John D. (2021). *TreeMap 2016—A tree-level model of the forests of the conterminous United States circa 2016*. Fort Collins, CO: Forest Service Research Data Archive. https://doi.org/10.2737/RDS-2021-0074	-	n/a, continuous
Beaver Highly Suitable Habitat	LANDFIRE. (2023). *Existing Vegetation Type* [dataset]. LANDFIRE Program: Data Products - Vegetation. https://landfire.gov/evt.php Macfarlane, W. W., Wheaton, J. M., Bouwes, N., Jensen, M. L., Gilbert, J. T., Hough-Snee, N., & Shivik, J. A. (2017). *Modeling the capacity of riverscapes to support beaver dams*. Geomorphology, 277, 72–99. https://doi.org/10.1016/j.geomorph.2015.11.019 Riley, Karin L.; Grenfell, Isaac C.; Finney, Mark A.; Shaw, John D. (2021). *TreeMap 2016—A tree-level model of the forests of the conterminous United States circa 2016*. Fort Collins, CO: Forest Service Research Data Archive. https://doi.org/10.2737/RDS-2021-0074 U.S. Geological Survey. (2023). *National Hydrography Dataset	U.S. Geological Survey (Perennial Rivers and Streams)* [dataset]. National Hydrography Dataset. https://www.usgs.gov/national-hydrography/national-hydrography-dataset	-	n/a, continuous

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric

CAL FIRE Subdivision Review	CAL FIRE (2024). *Subdivision Review Program* [dataset]. Provided via email by Captain Arend Tosti September 2024.	-	-
CAL FIRE WUII	CAL FIRE (2024). *WUI24_1* [dataset]. Provided via email by Travis Bott May 2024.	-	-
California Black Oak	Center for Watershed Sciences, UC Davis, & California Forest Observatory (Salo Sciences). (2020). *California Black Oak Stands* (Spatial Data]. Sierra Nevada Regional Resource Kits. https://rrk.sdsc.edu/sierra.html#data_credits	-	Vegetation Departure
California Black Oak Acorn Harvesting	Center for Watershed Sciences, UC Davis, & California Forest Observatory (Salo Sciences). (2020). *California Black Oak Stands* (Spatial Data]. Sierra Nevada Regional Resource Kits. https://rrk.sdsc.edu/sierra.html#data_credits	-	Vegetation Departure
Communication Infrastructure	Amador County. *Approved Comm Towers* [dataset]. Provided via email by Captain Arend Tosti July 2024. CAL FIRE. *2024 AEU Land Tender Map | Communications Facilities* [dataset]. Provided via email by Captain Arend Tosti June 2024. U.S. Department of Homeland Security. (2023a-2023j). [dataset]. Homeland Infrastructure Foundation-Level Data (HIFLD) https://hifld-geoplatform.opendata.arcgis.com/	Yes	-
Critical Access Roads	Amador County. *Amador Roads* [dataset]. Provided via email by Captain Arend Tosti July 2024. Humanitarian OpenStreetMap Team (HOT). 2020. "HOTOSM - Roads." Dataset. HOTOSM - Roads. Humanitarian OpenStreetMap Team (HOT) https://data.humdata.org/dataset El Dorado County. *Roads* [dataset]. Provided via email by Captain Arend Tosti June 2024.	-	-

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric

Critical Structures	Amador County. *Amador Critical Infrastructure* | *Evacuation Centers, Warming/Cooling Centers, Public Buildings* [dataset]. Provided via email by Captain Arend Tosti July 2024. CAL FIRE. *Critical Economic Centers* [dataset]. Provided via email by Captain Arend Tosti July 2024. El Dorado County. *EDC Critical Facilities* | *Child Care, College, Community Nursing, Convention Centers / Fairgrounds, Emergency Operations Center, Government Facility, Government Services, National Shelter, Private School, Public School, Senior Care Facility, Senior Community Services, Senior Day Care Center, Shelter* [dataset]. Provided via email by Captain Arend Tosti June 2024.	Yes	-
Dams	El Dorado County. *EDC Critical Facilities* | *Conventional Hydroelectric Power Plants* [dataset.] Provided via email by Captain Arend Tosti June 2024.	Yes	-
Emergency Service Facilities	Amador County. *Amador Public Buildings* | *Hospital, Clinic, EOC* [dataset]. Provided via email by Captain Arend Tosti July 2024. El Dorado County. *EDC Critical Facilities* | *Hospital, Clinic, Emergency Medical Service Stations, Law Enforcement, Health Care Services, Local Law Enforcement, and Fire Stations* [dataset]. Provided via email by Captain Arend Tosti June 2024. U.S. Department of Homeland Security. □2021; 2023a; 2023b). [dataset]. Homeland Infrastructure Foundation-Level Data □HIFLD□. https://hifld-geoplatform.opendata.arcgis.com/	Yes	-
Energy Facilities	U.S. Department of Homeland Security. □2023□ *Power Plants* [dataset]. Homeland Infrastructure Foundation-Level Data □HIFLD□ https://hifld-geoplatform.opendata.arcgis.com/datasets/power-plants-2/explore U.S. Department of Homeland Security. □2021□ *HIFLD Open Data—Power Substations* □Deprecated) [dataset]. Homeland Infrastructure Foundation-Level Data □HIFLD□ https://hifld-geoplatform.opendata.arcgis.com/	Yes	-

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric
Freshwater Wetlands	U.S. Fish & WIldlife Service. □2023□ *National Wetlands Inventory □NWI□*□Dataset]. U.S. Fish & WIldlife Service - National Wetland Inventory. https://www.fws.gov/program/national-wetlands-inventory/data-download	-	pFRID
High Erosion Potential	California Department of Forestry and Fire Protection. (n.d.). *Post-fire Soil Erosion* □Dataset]. California Department of Forestry and Fire Protection. https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program /GIS□Mapping-and-Data-Analytics	-	-
Historic Features	Stutts, M. □2021□ *National Register of Historic Places* [dataset]. National Park Service DataStore. https://irma.nps.gov/DataStore/Reference/Profile/2297306	-	-
Lakes	U.S. Geological Survey. □2023□ *National Hydrography Dataset | U.S. Geological Survey* □Lakes□[dataset]. National Hydrography Dataset. https://www.usgs.gov/national-hydrography/national-hydrography-dataset	-	-
Managed Timberlands	U.S. Forest Service. □2023□ EDW Timber Harvests [dataset]. Forest Service Activity Tracking System. https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_TimberHarvest_01/MapSer ver	-	-
Monitoring Stations	National Interagency Fire Center □NIFC□ □2023□ *Interagency Remote Automatic Weather Stations □RAWS□*[dataset]. https://data-nifc.opendata.arcgis.com/datasets/29185087b4594a35abe059cbdbf 97ee4_1/explore National Oceanic and Atmospheric Administration □NOAA□ □2023□ *National Weather Service: Observed Weather Stations*. https://forecast.weather.gov/stations.php?foo=0 Natural Resource Conservation Service □NRCS□ □2023□ *NRCS National Water Climate Center—Active SNOTEL Stations as of 2023□December-13*. https://wcc.sc.egov.usda.gov/nwcc/yearcount?network=sntl&counttype=statelist &state=	Yes	-

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric
	U.S. Department of Homeland Security. (2023). *Streamflow Gaging Stations [dataset].* Homeland Infrastructure Foundation-Level Data (HIFLD). https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::streamflow-gaging-stations/about		
Montane Mixed-Conifer (rSDI of 0–0.25)	Riley, Karin L.; Grenfell, Isaac C.; Finney, Mark A.; Shaw, John D. (2021). *TreeMap 2016: A tree-level model of the forests of the conterminous United States circa 2016*. Fort Collins, CO: Forest Service Research Data Archive. https://doi.org/10.2737/RDS-2021-0074		
Montane Mixed-Conifer (rSDI of 0.25–0.35)	Welty, J., & Jeffries, M. (2021). *Combined wildland fire datasets for the United States and certain territories, 1800s-Present* (Dataset]. U.S. Geological Survey. https://doi.org/10.5066/P9ZXGFY3	-	Yellow Pine Mixed-conifer rSDI
Montane Mixed-Conifer (rSDI of 0.35–0.6)	National Interagency Fire Center (NIFC). (n.d.). *Wildland Fire Perimeters Full History* (Dataset]. https://data-nifc.opendata.arcgis.com/datasets/nifc::wfigs-interagency-fire-perimeters/about		
Montane Mixed-Conifer (rSDI of 0.6–)	National Interagency Fire Center (NIFC). (n.d.). *Wildland Fire Perimeters Fire Perimeters to Date* (Dataset]. https://data-nifc.opendata.arcgis.com/datasets/nifc::wfigs-2024-interagency-fire-perimeters-to-date/about		
Perennial Rivers and Streams	U.S. Geological Survey. (2023). *National Hydrography Dataset | U.S. Geological Survey* (Perennial Rivers and Streams) [dataset]. National Hydrography Dataset. https://www.usgs.gov/national-hydrography/national-hydrography-dataset	-	-

Recreation Areas	OpenSkiMap.org.□2023□ *OpenSkiMap.org* □Ski Areas) [dataset]. Skimap.org. https://openskimap.org/?about#2/40/□100 U.S. Forest Service. □2023□ *Recreation Sites □Feature Layer*) [dataset]. U.S. Forest Service Geospatial Data Discovery. https://data-usfs.hub.arcgis.com/datasets/usfs::recreation-sites-feature-layer/ab out	-	pFRID

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric
Riparian Areas	U.S. Forest Service. □2018□ Classification and Assessment with LANDSAT of Visible Ecological Groupings □CALVEG□□Dataset]. U.S. Forest Service - Pacific Southwest Region - Remote Sensing Lab. https://www.fs.usda.gov/detail/r5/landmanagement/gis/?cid=STELPRDB5327836	-	pFRID

Structure Transmission Zone	Dillon, G. K., Scott, J. H., Jaffe, M. R., Olszewski, J. H., Vogler, K. C., Finney, M. A., Short, K. C., Riley, K. L., Grenfell, I. C., Jolly, W. M., & Brittain, S. □2023□ *Spatial datasets of probabilistic wildfire risk components for the United States □270m□/□*3rd edition) □Fort Collins, CO□ Forest Service Research Data Archive. https://doi.org/10.2737/RDS□2016□0034□3 Hijmans, R. J., Bivand, R., Pebesma, E., & Sumner, M. D. □2023□ *terra: Spatial Data Analysis* □1.7□65□ □Computer software]. https://cran.r-project.org/web/packages/terra/index.html Oak Ridge National Laboratory □ORNL□& Federal Emergency Management Agency □FEMA□, Geospatial Response Office. □2023□ *USA Structures*. https://gis-fema.hub.arcgis.com/pages/usa-structures ONEGEO Data. □2023□ https://onegeo.co/data/ Short, K. C., Grenfell, I. C., Riley, K. L., & Vogler, K. C. □2020□ *Pyromes of the conterminous United States* [dataset]. Forest Service Research Data Archive. https://doi.org/10.2737/RDS□2020□0020 U.S. Forest Service. □2023□ *FSim-Wildfire Risk Simulation Software	Missoula Fire Sciences Laboratory*. https://www.firelab.org/project/fsim-wildfire-risk-simulation-software	-	n/a, continuous
Structures	Oak Ridge National Laboratory □ORNL□& Federal Emergency Management Agency □FEMA□, Geospatial Response Office. □2023□ *USA Structures*. https://gis-fema.hub.arcgis.com/pages/usa-structures ONEGEO Data. □2023□ https://onegeo.co/data/	Yes	-

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric

Trails	U.S. Department of Homeland Security. (2023). *Trails* [dataset]. Homeland Infrastructure Foundation-Level Data (HIFLD). https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::trails/about	-	pFRID
Transmission Lines	CAL FIRE. *Selected Transmission Lines California Energy Commission (CEC)* [dataset]. Provided via email by Tristan Howard July 2024. U.S. Department of Homeland Security. (2023). *Transmission Lines* [dataset]. Homeland Infrastructure Foundation-Level Data (HIFLD). https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::transmissio n-lines/about	-	-
Water Facilities	Alpine County. *Alpine County Water Infrastructure* [dataset]. Provided via email by Captain Arend Tosti September 2024. Amador County. *First Mace Meadow Water Association Water Facilities* [dataset]. Provided via email by Captain Arend Tosti July 2024. Amador Water Agency (AWA). (2024). AWA Export 071024 [dataset]. Provided via email by Lucas Carthew July 2024. California Governor's Office of Emergency Services (CA OES). (2019). *Wastewater Treatment Plants – Major, Minor and Other/Nonclassified*. https://arc-gis-hub-home-arcgishub.hub.arcgis.com/datasets/CalEMA::wastewat er-treatment-plants-major-minor-and-other-nonclassified-/about. El Dorado County. *EDC Critical Facilities | Bulk Water Station, Water Treatment Plant, Waste Water Treatment Plant* [dataset]. Provided via email by Captain Arend Tosti June 2024. El Dorado Irrigation District. *EID Assets* [dataset]. Provided via email by Chief Jeff Hoag May 2024. Jackson Valley Irrigation District. *Water Facilities* [dataset]. Provided via email by Captain Arend Tosti July 2024.	Yes	-

Strategic Area, Resources & Assets

SARA Name	Data Source	Avoid Treatment	Departure Metric
	Pine Grove Community Service District. *Water Tank* [dataset]. Provided via email by Captain Arend Tosti July 2024.		
Whitebark Pine	Riley, Karin L.; Grenfell, Isaac C.; Finney, Mark A.; Shaw, John D. □2021□ *TreeMap 2016□A tree-level model of the forests of the conterminous United States circa 2016*. Fort Collins, CO□Forest Service Research Data Archive. https://doi.org/10.2737/RDS□2021□0074	-	n/a, continuous

Table 3 - SARA NORMA metrics. See Section 3 - Strategic Areas, Resources & Assets for a description of how the normalized valuation metrics are applied.

SARA Normalized Valuation Metrics

SARA Name	SARA Type	Sub-type	Spatial Type	Global Uniqueness Score	Regional Uniqueness Score	Years to Replace	Replacement Cost	Ecological Function	ROSE Multiplier
Above Ground Water Delivery □Wooden□	asset	anthropogenic	assemblage	5	5	□10 years	□$1m	-	1
Aboveground Live Biomass	resource	ecologic	assemblage	5	5	□10 years	not asset	process	2
Aspen Highly Suitable Habitat	resource	ecologic	assemblage	5	3	□10 years	not asset	ecosystem	2
Beaver Highly Suitable Habitat	resource	ecologic	assemblage	2	2	□10 years	not asset	ecosystem	2
CAL FIRE Subdivision Review	strategic area	anthropogenic	assemblage	2	2	□10 years	□$1m	-	1
CAL FIRE WUII	strategic area	anthropogenic	assemblage	5	5	□10 years	□$1m	-	1
California Black Oak	resource	ecologic	assemblage	3	2	□10 years	not asset	ecosystem	1

California Black Oak Acorn Harvesting	resource	ecologic	assemblage	1	1	☐10 years	not asset	multiple ecologic values	1
Communication Infrastructure	asset	anthropogenic	discrete	5	5	☐10 years	$100k $500k	-	1
Critical Access Roads	asset	anthropogenic	assemblage	5	3	☐10 years	☐$1m	-	1
Critical Structures	asset	anthropogenic	discrete	4	4	☐10 years	☐$1m	-	1
Dams	asset	anthropogenic	discrete	5	5	☐10 years	☐$1m	-	1
Emergency Service Facilities	asset	anthropogenic	discrete	5	5	☐10 years	☐$1m	-	1
Energy Facilities	asset	anthropogenic	discrete	5	5	☐10 years	☐$1m	-	1
Freshwater Wetlands	resource	ecologic	assemblage	3	3	☐10 years	not asset	ecosystem	1
High Erosion Potential	strategic area	ecologic	discrete	5	5	unknown	not asset	process	1
Historic Features	asset	anthropogenic	discrete	3	3	irreplaceable	$100k $500k	-	1
Lakes	resource	ecologic	discrete	3	5	unknown	not asset	ecosystem	1
Managed Timberlands	resource	anthropogenic	assemblage	5	5	☐10 years	not asset	biological	1
Monitoring Stations	asset	anthropogenic	discrete	5	3	☐10 years	☐$100k	-	1
Montane Mixed-Conifer (rSDI of resource 0☐0.25☐		ecologic	assemblage	3	3	☐10 years	not asset	process	1
Montane Mixed-Conifer (rSDI of resource 0.25☐0.35☐		ecologic	assemblage	3	3	☐10 years	not asset	process	1
Montane Mixed-Conifer (rSDI of resource 0.35☐0.6☐		ecologic	assemblage	3	3	☐10 years	not asset	process	1

Montane Mixed-Conifer (rSDI of resource 0.6□□		ecologic	assemblage	3	3	□10 years	not asset	process	1
Perennial Rivers and Streams	resource	ecologic	assemblage	3	2	unknown	not asset	process	1
Recreation Areas	asset	anthropogenic	assemblage	5	5	□10 years	□$100k	-	1
Riparian Areas	resource	ecologic	assemblage	5	5	□10 years	not asset	ecosystem	1
Structure Transmission Zone	strategic area	anthropogenic	assemblage	5	5	□10 years	□$1m	-	2
Structures	asset	anthropogenic	discrete	5	5	□10 years	$500k - $1m	-	1
Trails	asset	anthropogenic	assemblage	4	5	□10 years	$100k $500k	-	1
Transmission Lines	asset	anthropogenic	assemblage	3	3	□10 years	□$1m	-	1
Water Facilities	asset	anthropogenic	discrete	5	5	□10 years	□$1m	-	1
Whitebark Pine	resource	ecologic	assemblage	3	3	□10 years	not asset	ecosystem	2

Table 4 - SARA Base scoring metrics and scores. Note, all SARAs begin with a value of one, which is then added to by each metric to reach the Base Score (Section 3 - Strategic Areas, Resources & Assets).

SARA Scoring Metrics and Base Score

SARA Name	Function	Uniqueness	Years to Replacement	Replacement Cost	Public Safety	Base Score
Above Ground Water Delivery □Wooden□	0	0	0	1.5	0.5	**3**
Aboveground Live Biomass	0	0	1.5	1.5	0	**4**
Aspen Highly Suitable Habitat	0	1	1.5	1	0	**4.5**
Beaver Highly Suitable Habitat	0	2	1.5	1	0	**5.5**
CAL FIRE Subdivision Review	0	2	0	1.5	0.5	**5**
CAL FIRE WUII	0	0	0	1.5	0.5	**3**
California Black Oak	0	2	1.5	1	0	**5.5**

California Black Oak Acorn Harvesting	0	2	1.5	2	0	**6.5**
Communication Infrastructure	1	0	0	0.5	1	**3.5**
Critical Access Roads	0	1	0	1.5	1	**4.5**

SARA Scoring Metrics and Base Score

SARA Name	Function	Uniqueness	Years to Replacement	Replacement Cost	Public Safety	Base Score
Critical Structures	1	0	0	1.5	0.5	**4**
Dams	1	0	0	1.5	1	**4.5**
Emergency Service Facilities	1	0	0	1.5	0.5	**4**
Energy Facilities	0	1	1	1	0	**4**
Freshwater Wetlands	0	0	1.75	1.5	0	**4.25**
High Erosion Potential	1	1	2	0.5	0	**5.5**
Historic Features	0	1	1.75	1	0	**4.75**
Lakes	0	0	0.5	0.5	0	**2**
Managed Timberlands	1	1	0	0	0.5	**3.5**
Monitoring Stations	0	2	1.75	1.5	0	**6.25**
Montane Mixed-Conifer (rSDI of 0□0.25□	0	1	1.5	1.5	0	**5**
Montane Mixed-Conifer (rSDI of 0.25□0.35□	0	1	1.5	1.5	0	**5**
Montane Mixed-Conifer (rSDI of 0.35□0.6□	0	1	1.5	1.5	0	**5**
Montane Mixed-Conifer (rSDI of 0.6□□	0	1	1.5	1.5	0	**5**
Perennial Rivers and Streams	0	0	0	0	0	**1**
Recreation Areas	1	0	0	1.5	0.5	**4**
Riparian Areas	0	0	1	1	0	**3**
Structure Transmission Zone	0	0	0	1.5	0.5	**3**

Structures	1	0	0	1	0	**3**
Trails	0	0	0	0.5	0	**1.5**
Transmission Lines	0	1	0	1.5	0.5	**4**
Water Facilities	1	0	0	1.5	0.5	**4**
Whitebark Pine	0	1	1.5	1	0	**4.5**

Response Functions

Table 5 - Disturbance response functions for all SARAs found in the Amador El Dorado Unit.

Disturbance Response Functions						
Hazard Type	Wildfire					
Intensity Classification □Conditional Flame Length)	**1** □2' (non-zero)	**2** 2□4'	**3** 4□6'	**4** 6□8'	**5** 8□12'	**6** □12'
Above Ground Water Delivery □Wooden□	□0.1	□0.2	□0.3	□0.7	□1	□1
Aboveground Live Biomass - FRG 1	0.287	0.162	0.109	0.046	□0.538	□1
Aboveground Live Biomass - FRG 2	0.31	0.179	0.126	0.062	□0.542	□1
Aboveground Live Biomass - FRG 3	0.286	0.161	0.108	0.045	□0.538	□1
Aboveground Live Biomass - FRG 4	0.295	0.169	0.117	0.053	□0.54	□1
Aboveground Live Biomass - FRG 5	0.288	0.163	0.11	0.047	□0.538	□1
Aboveground Live Biomass - FRG no data	0.288	0.163	0.11	□0.538	□0.538	□1
Aspen Highly Suitable Habitat	0.174	0.098	□0.104	□0.121	□0.26	□0.427
Beaver Suitable Habitat □Modeled)	0.218	0.241	0.244	0.239	0.265	0.241
CAL FIRE Subdivision Review	□0.1	□0.3	□0.6	□0.8	□0.9	□1
CAL FIRE WUII	□0.1	□0.3	□0.6	□0.8	□0.9	□1
California Black Oak	0.4	0.6	0.2	□0.4	□0.9	□0.9

California Black Oak Acorn Harvesting	0.4	0.6	0.2	□0.4	□0.9	□0.9
Communication Infrastructure	0	0	□0.1	□0.3	□0.4	□0.5
Critical Access Roads	0	□0.05	□0.1	□0.15	□0.2	□0.3
Critical Structures	□0.1	□0.2	□0.4	□0.6	□0.8	□0.9
Dams	0	0	0	□0.1	□0.2	□0.4
Emergency Service Facilities	□0.125	□0.225	□0.4	□0.6	□0.8	□0.925
Energy Facilities	□0.125	□0.225	□0.4	□0.6	□0.8	□0.925
Freshwater Wetlands	0.2	0.1	□0.1	□0.2	□0.3	□0.4

Disturbance Response Functions

Hazard Type	Wildfire					
Intensity Classification □Conditional Flame Length)	**1** □2' (non-zero)	**2** 2□4'	**3** 4□6'	**4** 6□8'	**5** 8□12'	**6** □12'
High Erosion Potential	□0.1	□0.1	□0.1	□0.3	□0.7	□0.7
Historic Features	□0.35	□0.5	□0.7	□1	□1	□1
Lakes	0.13	0.08	□0.138	□0.413	□0.68	□0.888
Managed Timberlands	□0.042	□0.08	□0.219	□0.266	□0.672	□1
Monitoring Stations	□0.075	□0.125	□0.3	□0.45	□0.65	□0.775
Montane Mixed-Conifer (rSDI of 0□0.25□	□0.088	□0.088	□0.123	□0.163	□0.526	□0.919
Montane Mixed-Conifer (rSDI of 0.25□0.35□	□0.097	□0.097	□0.127	□0.153	□0.481	□0.886
Montane Mixed-Conifer (rSDI of 0.35□0.6□	0.112	0.112	0.116	0.105	□0.361	□0.91
Montane Mixed-Conifer (rSDI of 0.6□□	0.329	0.329	0.388	0.479	0.56	□0.743
Perennial Rivers and Streams	0.13	0.08	□0.138	□0.413	□0.68	□0.888

Recreation Areas	0	0	□0.05	□0.1	□0.2	□0.3
Riparian Areas	□0.657	□0.657	□0.664	□0.679	□0.895	□1
Structure Transmission Zone	□0.2	□0.3	□0.5	□0.6	□0.7	□0.8
Structures	□0.1	□0.2	□0.4	□0.6	□0.8	□0.9
Trails	0	0	□0.05	□0.1	□0.2	□0.3
Transmission Lines	□0.13	□0.17	□0.3	□0.5	□0.63	□0.7
Water Facilities	□0.125	□0.225	□0.4	□0.6	□0.8	□0.925
Whitebark Pine	□0.098	□0.122	□0.233	□0.33	□0.377	□0.645

Management Response Functions

HCD□	CMR□ TH	CMR□ URC	CMR□ TA	HRB□ HRB	MRM□ CT	MTH - ISR	MTH□ RGM□GMP TH	MTH□ GMP URC	MTH□REV□A		RGM□ MASL	RGM □TFF	RXF□ AI	RXF□ GFL
Above Ground Water Delivery (wooden)	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Aboveground Live Biomass - FRG 1	□0.005	□0.157	□0.081	0	□0.119	0	□0.005	□0.157	0.28	0	□0.242	0	□0.126	□0.098
Aboveground Live Biomass - FRG 2	□0.01	□0.172	□0.12	0	□0.114	0	□0.01	□0.172	0.273	□0.011	□0.328	0	□0.121	□0.095

Table 6 - Management Codes used in management options and displayed in the Stewardship Atlas attribution for Amador El Dorado Unit.

Management Option Codes

Initial Treatment	Method	Prescription	Code
Complex Mechanical Removal □CMR□	Urban Clearing	Clearing	CMR□URC
	Thinning	Thinning	CMR□TH
Herbicides □HCD□	Herbicides	Targeted	HCD□TA
Herbivory □HRB□	Herbivory	Herbivory	HRB□HRB
Mechanical Rearrangement □RGM□	Mechanical Rearrangement	Grapple Pile	RGM□GMP
	Mechanical Rearrangement	Mastication	RGM□MASL
	Mechanical Rearrangement	Mowing	RGM□TFF
Mechanical Removal □MRM□	Mechanical Removal	Commercial Thinning	MRM□CT
Manual □MTH□	Manual	Invasives Removal	MTH□SR
	Manual	Thinning	MTH□TH
	Manual	Urban Clearing	MTH□URC
Revegetation □REV□	Revegetation	Revegetation	REV□A
Rx Fire □RXF□	Rx Fire	Aerial	RXF□AI
	Rx Fire	Ground	RXF□GFL

Table 7 - Management response functions for all SARAs found in the Amador El Dorado Unit release.

Management Response Functions

HCD	CMR TH	CMR URC	CMR TA	HRB HRB	MRM CT	MTH - ISR	MTH TH	MTH URC	REV MASL	A RGM	GMP	RGM TFF	RXF AI	RXF GFL
Aboveground Live Biomass - FRG 3	0.004	0.155	0.067	0	0.119	0	0.004	0.155	0.287	0	0.235	0	0.126	0.098
Aboveground Live Biomass - FRG 4	0.006	0.157	0.07	0	0.114	0	0.006	0.157	0.287	0.001	0.259	0	0.127	0.101
Aboveground Live Biomass - FRG 5	0.007	0.156	0.057	0	0.118	0	0.007	0.156	0.291	0	0.241	0	0.124	0.096
Aboveground Live Biomass - FRG no data	0.006	0.159	0.079	0	0.117	0	0.006	0.159	0.284	0.002	0.261	0	0.125	0.098
Aspen Highly Suitable Habitat	0.014	0.106	0.046	0	0.096	0	0.014	0.106	0	0.006	0.099	0	0.035	0.133
Beaver Suitable Habitat Modeled)	0.466	0.538	0.51	0.463	0.607	0	0.466	0	0	0.528	0.586	0	0.477	0.475
CAL FIRE Subdivision Review	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAL FIRE WUII	0	0	0	0	0	0	0	0	0	0	0	0	0	0
California Black Oak	0.5	0.1	0.4	0.1	0.5	0.2	0.5	0.5	0.1	0.2	0.5	0.2	0.5	0.8
California Black Oak Acorn Harvesting	0.5	0.1	0.4	0.1	0.5	0.2	0.5	0.5	0.1	0.2	0.5	0.2	0.5	0.8
Communication Infrastructure	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Critical Access Roads	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Freshwater Wetlands	0.1	0.1	0.3	0.7	0.3	0.3	0.4	0.3	0.3	0.3	0.3	1	0.5	0.1
High Erosion Potential	0.1	0.1	0	0	0	0	0	0	0.5	0.3	0.2	0.1	0.3	0.2
Historic Features	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lakes	0.2	0	0	0	0.1	0	0	0	0	0.1	0.1	0	0	0
Managed Timberlands	0.007	0.128	0.014	0	0.016	0	0.007	0.007	0.016	0.005	0.088	0	0.115	0.074
Monitoring Stations	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Critical Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dams	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emergency Service Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Segmentation

Management unit segmentation was developed from Vibrant Planet's synthetically derived canopy cover data and canopy height models (Section 4 - Landscape Conditions). Multiple datasets were used as input to the deep learning model:

- National Agriculture Imagery Program □NAIP□(bands RGB□IR□

Management Response Functions

HCD□	CMR□ TH	CMR□ URC	CMR□ TA	HRB□ HRB	MRM□ CT	MTH - ISR	MTH□ TH	MTH□ URC	REV□A MASL	RGM□	GMP	RGM □TFF	RXF□ AI	RXF□ GFL
Montane Mixed-Conifer (rSDI of 0□0.25□	0	□0.167	□0.207	0	0	0	0	□0.167	0	□0.069	□0.165	0	□0.139	□0.115
Montane Mixed-Conifer (rSDI of 0.25□0.35□	□0.058	□0.21	□0.13	0	0	0	□0.058	□0.21	0	□0.07	□0.202	0	□0.15	□0.127
Montane Mixed-Conifer (rSDI of 0.35□0.6□	0.15	□0.021	0.021	0	0.146	0	0.15	□0.021	0	0	0.068	0	0.155	0.128
Montane Mixed-Conifer (rSDI of 0.6□□	0.295	0.229	0.242	0	0.38	0	0.295	0.229	0	0	0.561	0	0.307	0.269
Perennial Rivers and Streams	□0.2	0	0	0	□0.1	0	0	0	0	□0.1	□0.1	0	0	0
Recreation Areas	0.05	0	0.05	0.05	0.15	0.05	0.15	0	0.15	0	0.05	0.05	0.05	0.15
Riparian Areas	□0.083	□0.531	□0.606	0	□0.226	0	□0.083	□0.392	0	□0.077	□0.578	0	□0.614	□0.6
Structure Transmission Zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trails	0.05	0	0.05	0.05	0.15	0.05	0.15	0	0.15	0	0.05	0.05	0.05	0.15
Transmission Lines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Whitebark Pine	0.016	0.036	0.015	0	0.004	0	0.016	0.036	0	0.005	0.015	0	□0.078	□0.054

- 3DEP DEM 10 meter product (elevation, slope, aspect, curvature)
- Sentinel-2 Level-2A 2022 monthly median product (all bands)

Wildfire Hazard Modeling

This release utilized WildEST fire modeling for fire intensity and FSim fire modeling for burn probability.
For fire intensity, fuelscapes were developed for no-action and post-treatment scenarios. WildEST was then used to model no-action and post-treatment fire intensities. These fuelscapes were based on a Pyrologix west-wide 2024-capable fuelscape that was built from LANDFIRE 2020 data and fuel rules but updated with rules and modifications from multiple previous Pyrologix fuelscape calibration workshops to better reflect fire behavior across the West. WildEST was run using standard settings; see the product guide for more information on WildEST.

For burn probability, the pre-existing wall-to-wall Wildfire Risk Reduction Infrastructure Team (WRRIT) 270m FSim annual burn probability raster was used as an input to WildEST. WildEST upsampled the burn probability to 30m, incorporating the no-action fuelscape burnable mask into the process. The WRRIT burn probability was developed by Pyrologix for the Wildfire Crisis Strategy effort.

Departure

Vegetation departure (Section 3 - Landscape Conditions) can be used to estimate the degree to which areas on the landscape differ from the natural range of variability (NRV) in terms of vegetation type and structure. The vegetation departure dataset used in this iteration was the default Vibrant Planet methodology.

Fire return interval departure is used to estimate the degree to which a location on the landscape is experiencing less or more wildfire than under historic conditions. This landscape uses the Vibrant Planet default pFRID methodology, following the methods of Safford and Van De Water (2014), measuring the extent to which contemporary fires are burning at frequencies similar to the frequencies that occurred prior to Euroamerican settlement.

Post-Fire Regeneration

Post-fire regeneration modeling is based on the Vibrant Planet default methodology from Davis, et al. (2023, 2023a) which assesses the probability of regeneration for six western conifer species following high and low fire severities under current and future climate scenarios.