

# 2023 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, City, and County 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.

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Unit Chief

Mike Blankenheim

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Date

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Pre-Fire Engineer

Arend Tosti

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Date

## **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.
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 the 2008 WUI Building Standards through cooperation with local government planning departments.
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<sup>1</sup>) 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.
- Inadequate community ingress/egress routes.
- Difficulty of fire suppression, resulting in safety problems for firefighters.
- Longer periods between recurring fires in many vegetation types, resulting in increasing volumes of fuel per acre.
- Increasing fire intensities.
- Increasing taxpayer costs and asset losses.
- More people are living and recreating in wildland interface areas, which adds to the increases in ignition sources, resulting in more fires. 95% of all ignitions are human caused.

### **Fire History**

The Unit's fire history is one of numerous small fires with large fires occurring every thirty to forty years. In September 2022, the Mosquito Fire burned in Placer and El Dorado Counties and was the State's largest fire last year. The Mosquito Fire burned a total of 76,788 acres and destroyed 78 structures. The Unit's fire history is one of numerous small fires with large fires occurring every thirty to forty years. 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.

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<sup>1</sup> 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 stable. 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 the 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 other critical wind patterns that are difficult to predict for AEU are the northerly and easterly winds. They are relatively rare, and often are forecasted only the day before. Northerly or easterly winds are typically warmer and drier than most other wind patterns due to air compression. These conditions provide the perfect environment for increased fire intensity and large fire growth. Fire growth is typically wind driven, however as these events recede, fire immediately returns to fuel/topography driven in opposing directions to the wind driven direction. This type of wind event is commonly referred to as a Santa Ana wind in Southern California, and a foehn wind in the Sierra/Cascade Region.

### **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 that 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 2,667,841 acres. AEU’s DPA serves approximately 910,589 acres. 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 major industries that support the local economy includes timber, tourism, recreation, wine and fruit

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

production, construction, service-oriented businesses and to a lesser extent, light industry. These industries have at one time, or another been affected by wildfires. Hundreds of thousands of dollars have been lost both directly and indirectly due to wildfires. It has been estimated that a closure of Highway 50 during the summer months would result in a loss of between 1.5 and 2 million dollars a day in the South Lake Tahoe Basin (including Nevada interests). Additionally, an estimated \$150,000

in revenue per day would be lost by west slope communities due to a closure of Highway 50 from the west county line to Echo summit.

<sup>2</sup> 2020 Census Data

## **Section II: UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

### **AEU Action Plan**

The Unit's Fire Management Plan was developed to address fire safe planning and hazardous fuel reduction concerns of state, federal, and local fire agencies, as well as fire safe councils and other collaborators. A detailed description of AEU facilities and firefighting resources is covered under each Battalion descriptions. The Fire Plan incorporates an across-the-board approach to reducing the occurrence and impact of wildland fires on communities and local resources. The coordinated effort involving, Engine Companies, Law Enforcement, and local Fire Safe Councils, has contributed to education of the public regarding Public Resources Code (PRC)-4291 defensible space requirements. This has also given the public the opportunity for input on community fire safety, evacuation planning and hazardous fuel reduction through the Community Wildfire Protection Plan (CWPP) process. These efforts have an emphasis on the wildland-urban interface, the homeowner and creating defensible space.

Shaded fuel breaks are also a large component of the overall fuel reduction effort with the Unit, focusing on those areas that support the safe ingress of fire suppression forces and egress of the civilians in the surrounding communities.

The Unit considers collaborator support extremely important. Lack of collaborators may eliminate otherwise important fuels modification and education projects from consideration. To gain community support, the Unit works closely with the Fire Safe Councils. Resource Conservation Districts, local governments, private cooperators, and Federal agencies in a coordinated effort to reduce the loss of life, property, and resources. Fire Safe Councils provide a forum for creating support for all kinds of projects. This resource has proven so effective that the Unit now accomplishes projects it could not accomplish in the past. Also, the Fire Safe Councils closely link their projects with projects in the Unit's Fire Plan. This allows greater progress towards the goal of reducing damage from wildfire.

CAL FIRE Battalion Chiefs acting as community wildfire leaders are an effective key to fire planning. As community wildland leaders, the Battalion Chiefs can only achieve the Unit's and Department's goals with support from the community they serve.

### **TREE MORTALITY**

California has been facing the worst epidemic of tree mortality in modern history. Five years of drought has 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 2022, roughly 36.3 million dead trees were counted across California, a dramatic increase from previous years. According to the 2022 USFS Aerial Detection Survey, the estimated number of dead trees by forested county within AEU was 1.4 million in El Dorado County, 1.2 million in Alpine County, and 310,000 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 forest is 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 is expected to moderate 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.

### **SECTION III: COLLABORATION**

#### **COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

##### **Plan Development Team:**

<b>Organization</b>	<b>Title</b>	<b>Contact Number</b>
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
El Dorado County Fire Safe and Satellite Council's	Chairperson/Co-Chairperson	(530) 647-1700
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
United States Forest Service	Humboldt/Toiyabe Forest	(775) 331-6444
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 IV: VALUES AT RISK**

### **A: VALUES**

Values refer to real, societal, and culturally important features that have the potential to be burned or damaged by wildfire. Sixteen values have been identified as to their risk from wildfire. The table below provides a description of the values evaluated.

<b>Values</b>	<b>Public Issue Category</b>	<b>Location and ranking methodology</b>
Hydroelectric power	Public welfare	Watersheds that feed run of the river power plants, ranked based on plant capacity
Fire-flood watersheds	Public safety Public welfare	Watersheds with a history of problems or conducive conditions to future problems, ranked based on affected downstream population
Soil erosion	Environment	Watersheds ranked based on erosion potential
Water storage	Public welfare	Watershed area up to 20 miles upstream from water storage facility, ranked based on water value and dead storage capacity of facility
Water supply	Public health	Watershed area up to 20 miles upstream from water supply facility
Scenic	Public welfare	Four-mile view shed around Scenic Highways and 1/4-mile view shed around Wild and Scenic Rivers, ranked based on potential impacts to vegetation types (tree versus non-tree types)
Timber	Public welfare	Timberlands ranked based on value/susceptibility to damage
Range	Public welfare	Rangeland ranked based on potential replacement feed cost by region/owner/vegetation type
Air quality	Public health Environment Public welfare	Potential damages to health, materials, vegetation, and visibility; ranked based on vegetation type and air basin
Historic buildings	Public welfare	Historic buildings ranked based on fire susceptibility
Recreation	Public welfare	Unique recreation areas or areas with potential damage to facilities, ranked based on fire susceptibility
Structures	Public safety Public welfare	Ranked based on housing density and fire susceptibility
Non-game wildlife	Environment Public welfare	Critical habitats and species locations based on input from California Department of Fish and Wildlife and other collaborators
Game wildlife	Public welfare Environment	Critical habitats and species locations based on input from California Department of Fish and Wildlife and other collaborators
Infrastructure	Public safety Public welfare	Infrastructure for delivery of emergency and other critical services (e.g., repeater sites, transmission lines)
Ecosystem Health	Environment	Ranking based on vegetation type/fuel characteristics

Knowledge of the type, magnitude, and location of values at risk, is critical to fire protection planning. Given the limits on fire protection resources, these resources should be allocated, at least in part, based on the value. Knowledge of values is also necessary to choose those projects, which will provide the greatest benefit for a given investment.

## B: COMMUNITIES

During the 2000 fire season wildfires burned millions of acres throughout the United States. These fires dramatically illustrated the threat to human lives and development. Under Executive Order, the **National Fire Plan** was created as a cooperative, long-term effort of the **USDA Forest Service**, **Department of the Interior**, and the **National Association of State Foresters**, to protect communities and restore ecological health on Federal lands.

A major component of the National Fire Plan was funding for projects designed to reduce fire risks to people and their property. A fundamental step in realizing this goal was the identification of areas that are at high risk of damage from wildfire. Federal fire managers authorized State Foresters to determine which communities were under significant risk from wildland fire on Federal lands.

**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 1,289 communities. Of those, 843 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	COUNTY NAME	FEDERAL THREAT
Bear Valley	ALPINE	F
Kirkwood	ALPINE	F
Markleeville	ALPINE	F
Paynesville	ALPINE	F
Woodfords	ALPINE	F
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
Grizzly Flat	EL DORADO	F
Kelsey	EL DORADO	F
Latrobe	EL DORADO	F
Omo Ranch	EL DORADO	F
Outingdale	EL DORADO	F
Placerville	EL DORADO	F
Pleasant Valley	EL DORADO	F
Pollock Pines	EL DORADO	F
Shingle Springs	EL DORADO	F
South Lake Tahoe	EL DORADO	F
Rancho Murrieta	SACRAMENTO	
Folsom	SACRAMENTO	F
Galt	SACRAMENTO	
Sacramento	SACRAMENTO	

## **SECTION V: PRE-FIRE MANAGEMENT STRATEGIES**

### **A: FIRE PREVENTION**

AEU's Fire Prevention and Pre-Fire Engineering Bureau establish management goals utilizing four primary components. These components are law enforcement, engineering, information / education, and cooperation.

Law enforcement staff investigates all fires for origin and cause and- enforce California's Forestry and Fire Laws, Penal Codes, Health and Safety Codes and Public Resources Codes throughout the Unit.

AEU incorporates a proactive approach to public information and education. Direct contact with the local schools and- cooperation with the local boards and councils, is a catalyst for positive communication between CAL FIRE staff and the communities they serve.

The balance of each of these components allows the prevention program to address statewide, regional, and local fire issues. AEU's Fire Prevention Bureau annually evaluates ignitions data for fire origin and cause. With the updated ignition data AEU's Battalion staff is better prepared to address and mitigate local issues; and to assist local fire prevention, education, and strategic planning.

## **INFORMATION AND EDUCATION**

### **Public Information Program:**

The Unit's Public Information Officer (PIO) provides media press releases, media advisories, and articles; posts and shares information on the Unit's social media platforms; coordinates and conducts interviews for television, radio, social media and blogs; prepares and disseminates fire information and incident information fact sheets; provides information on evacuations (in support of local law enforcement); and coordinates public education events with Battalion personnel. Duties also include responding as an Incident Information Officer (Field PIO, PIO Center Manager, PIO in JIC, and PIO on unified command incidents), locally or statewide.

### **Public Education and Awareness Program:**

The Public Education and Awareness Program is comprised of five components: School Programs, Group Programs, Exhibits / Displays, Parades, and Social Media.

1) School Programs are done throughout the Unit and reach children from preschool through 12<sup>th</sup> grade. The "team teaching" approach is used at the schools and is done on a request basis and is generally handled by engine companies. There is a variety of programs available depending on the request or needs of a particular school. For PreK-6 they include "Captain Cal" educational teaching, "Smokey Bear Team Teaching," "Flannel Board," "9-1-1," "Stop, Drop, and Roll," "Crawl Low Under Smoke," "Exit Drills in The Home," "Friendly Firefighter," "Fire Station Tours." State Farm's Smoke Detectives, Bic's Play Safe-Be Safe, Masters of Disasters, and Learn Not to Burn. Engine companies are also requested to visit schools to read to students in the classroom about fire and life safety.

For 7<sup>th</sup>-12<sup>th</sup> grades, the presentation is given in an assembly setting and the focus will range from Juvenile Fire Setting behaviors to Career Days. The Juvenile Fire Setting (JFS) education program is presented in the following format: introduction; ice breaker; and an explanation of who, what, when, where and why juveniles set fires and the consequences. A discussion follows on making good/bad choices, responsibilities of those choices (civil and criminal), and a review of basic fire safety principals. For Career Days, the program will include an overview of the agency, its mission, and the types of careers available and levels of education required to be competitive in the specific field.

2) Group Programs are done on a request basis and can cover all fire and life safety topics, including Defensible Space, Home Hardening, Disaster Preparedness, preparing a "Go Kit," Senior Fire Safety, and Fire Safety for the Disabled. The Unit provides these presentations to the public, local businesses, groups, clubs, and organizations. Requests vary and presentations may be done in conjunction with another agency, such as a fire or law enforcement agency.

3) Exhibits and Displays are designed and constructed for fairs, parades, home and garden shows, wildfire preparedness week, fire prevention week, burn awareness week, arson awareness week, homeowner association gatherings, National Night Out, etc. These may be done in concert with another emergency service agency, local government, or fire safe council.

4) Parades are handled at the Battalion level and requests are directed to the Battalion Chief. If it is appropriate, a fire engine and other equipment may be directed to participate.

5) Social media platforms – AEU's Facebook, Twitter, and Instagram – are used to increase awareness and educate the public on fire and life safety topics, including debris burning, defensible space, home hardening, campfire safety, water safety, grilling safety, fireworks safety, forest health, equipment use, returning home after a wildfire, evacuation and emergency preparedness, animal evacuations, fire prevention week, holiday safety (cooking, holiday decorations, and kitchen safety), and home heating. Social media posts and campaigns are handled directly through the PIO.

The JFS Program is initiated when a juvenile has been experimenting with fire. The juvenile and parents/caregivers are assessed utilizing the FEMA JFS assessment program. Following the assessment, the family will view one or two videos specifically designed for JFS. If further assistance is needed, the referrals are processed through the juvenile justice system.

Assessments are done in cooperation with the US Forest Service and local fire districts. The objectives of the JFS Program are:

- Identify juvenile fire setters.
- Assess the juvenile fire setter's needs.
- Provide life skill training and education. Provide referrals to family counseling.
- Evaluate fire setter's and program progress.

## **ENGINEERING & STRUCTURE IGNITABILITY**

Structure ignitability is a building's susceptibility to catching on fire. This is a growing concern as more homes and businesses are built in the wildland-urban interface. Measures can be taken to reduce the ignitability of structures in wildland areas through proper planning and building design techniques that prevent flames or windborne embers from entering the structure, and use of building materials that are fire and heat resistant.

**Planning:** AEU has been experiencing a rapid growth in recent years, with new homes and businesses being built in areas that were previously undeveloped. Lack of planning during early development in the Unit has led to many structures being built in areas that increase their exposure to the effects of wildfires, such as on steep slopes and within or at the top of large and small drainages. New construction in these areas has continued, leading to more structures with a high susceptibility to igniting during a wildfire. To address this issue, AEU's Wildfire Resiliency Program collaborates with county planning, building, and local fire departments to identify areas for new construction that minimize a building's exposure to wildfire. AEU enforces the state minimum fire safe regulations to ensure that new construction is located in areas that minimize a building's exposure to areas prone to wildfire. Implementing this approach aims to reduce the number of structure ignitions during a wildfire.

**Construction:** This plays a critical role in reducing the risk of structure ignitions during wildfires. In response to the recurring cycle of interface fire disasters, the California Department of Forestry and Fire Protection/Office of the State Fire Marshal has developed Wildland-Urban Interface Building Standards for new construction under Chapter 7A of the California Building Code. These standards establish minimum requirements for materials and material assemblies to provide a reasonable level of exterior wildfire exposure protection for buildings in Wildland-Urban Interface Fire Areas. The use of ignition-resistant materials and designs to resist the intrusion of flames or hot embers projected by a vegetation fire has proven to be the most prudent effort California has made to mitigate wildfire losses. The standards became effective on January 1, 2008, for all areas within State Responsibility Areas (SRA) and on July 1, 2008, in Local Responsibility Areas classified as Very High Fire Hazard Severity Zones. The standards address critical features such as roofing, attic ventilation, ignition-resistant siding, decking, windows, and wall vents. By implementing these new standards, we can reduce the number of hot embers that enter a building and ignite fires. This approach is crucial since hot ember intrusion is the primary cause of homes destroyed in wildland-urban interface fires

**Fire Hazard Severity Zone Maps:** Fire Hazard Severity Zone maps are required by Public Resources Code Section 4201, which mandates that the Department of Forestry and Fire Protection identify areas of significant fire hazards based on fuels, terrain, weather patterns, and other relevant factors. The FHSZ maps evaluate "hazard," not "risk". The zones take into account the probability of the area burning and potential fire behavior in the area based on elements such as fire history, potential fuel over a 30- to 50-year period, blowing embers, terrain, weather, and the likelihood of structures igniting. It is not an evaluation of the level of risk the area faces because it does not consider modifications such as defensible space, building construction, or water supply. Local governments use FHSZ maps to evaluate and update the safety element of general plans.

The Fire Hazard Severity Zone maps are updated every ten years, or as necessary, to reflect changes in the landscape, fuel conditions, or other factors that may impact fire hazard severity. . CAL FIRE released updated Fire Hazard Severity Zone (FHSZ) maps in late 2022, which are an update from the previous layers that were adopted in 2007. The new FHSZ layers were shared at public hearings in the 56 Counties in California with SRA and are expected to be adopted later in 2023.

## Pre-Fire Engineering

Pre-fire engineering is a critical part of the Unit Strategic Fire Plan. GIS mapping is used to analyze the fire environment and help Unit managers make key decisions for on the ground Pre-Fire projects. It is the goal of engineering to provide the most current and accurate data for the fire plan process. This goal is accomplished by field validating the data with Unit Battalions, collaborators, county officials, and federal agencies.

### Objectives:

- Update the Assets at Risk data.
- Update the fuels for the Unit.
- Maintain current and up to date county parcel data.
- Work with Unit personnel and collaborators to enhance the fire plan data.
- Create Pre-Attack Maps and Plans

## B. VEGETATION MANAGEMENT

AEU has an active Vegetation Management Program (VMP). This program is responsible for developing landowner partnerships with individuals, homeowners' associations, ranches, parks, conservancies, and timberland owners for fuel reduction and prescribed fire projects. All VMP projects are in alignment with the Unit Fire Plan goals and strategies. In 2022, AEU's VMP program includes the following projects:

<u>Project</u>	<u>County</u>	<u>Acres</u>	<u>Status</u>
Sly Park	El Dorado	3,909	Active
Shake Fiddletown	Amador	2,500	Active
Georgetown Divide	El Dorado	4,888	Active
Auburn Lake Trails	El Dorado	426	Active
Van Vleck / Sac Valley Shooting Center	Sacramento	5,000	Active
Prairie City SVRA	Sacramento	836	Active
Pine Acres	Amador	2,544	Active
Doaks	Amador	2,171	Active
Amoruso	Amador	1,100	Active
Ladies Valley	El Dorado	320	Active
Rancho Arroyo Seco	Amador	5,005	Active
Sacramento Valley Conservancy	Sacramento	6,101	Active
Lyon Ranch	El Dorado	1,500	Active
Shake Omo	Amador/El Dorado	3,572	Active
Salmon Falls	El Dorado	3,933	Final review phase
Shay Creek	Alpine	75	In development

### California Forest Improvement Program (CFIP)

The California Forest Improvement Program (CFIP) is a state-run cost share program designed to assist private timberland owners in the management of their non-industrial timberlands. Through CFIP funding, CAL FIRE will reimburse 75% - 90% of the cost of eligible practices based on cap rates. Examples of cost share practices include site preparation, timber stand thinning, pruning, and chemical release aid in forest stand improvement and reduce fuel loading.

In 1999, CAL FIRE foresaw the need to expand the ability of the program to meet other watershed needs. These needs include thinning, shaded fuel breaks, and other land treatments or forest resource improvement projects consistent with PRC 4794.

## **Climate Change Initiative (CCI) Program**

The purpose of the CCI Grant Program Projects is to undertake fuel hazard reduction to reduce the risk and potential impact of wildfire to habitable structures in SRA.

Examples of projects include:

- Vegetation clearance in critical locations to reduce wildfire intensity and rate of spread.
- Selective tree removal (thinning) to improve forest health to withstand wildfire.
- Creation or maintenance of fuel breaks in strategic locations.
- Removing ladder fuels to reduce the risk of crown fires.
- Removing dying and dead trees.
- Community chipping days.
- Modification of vegetation along roads to provide for safer ingress and egress.
- Reduction of fuel loading around critical firefighting infrastructure.

Projects can be submitted by a local government, fire district, community services districts, water districts, special districts that have SRA within their jurisdiction, certified local conservation corps, Fire Safe Councils, or other nonprofit organizations. For additional information about California Change Initiative (CCI) grants visit:

[CALFIRE Grant Website](#)

## **Greenhouse Gas Reduction Fund (GGRF)**

CAL FIRE has received CCI funding from the Greenhouse Gas Reduction Fund (GGRF) for vegetation management projects which reduce or avoid GHG emissions. The goal for all projects is to ensure California's forests continue to be significant carbon storage "sinks" and to reduce or avoid GHG emissions due to pest damage, wildfires, and loss of forest tree cover from development to non-forest uses. Grants and cost share agreements will be issued on a competitive basis through an application process to public agencies, nonprofit organizations, Native American Tribes, and landowners for projects

on forestlands. All projects will need to show a GHG benefit to be eligible for funding. For more information about GGRF

grants visit: [CALFIRE Greenhouse Gas Website](#)

Examples of programs that will be used to deliver funds for projects:

- Fuels Reduction - Grants and cost share agreements for selective removal and utilization of vegetation to reduce wildfire hazards.
- Reforestation Services - Grants and cost share agreements to plant forest trees.

## **California Tahoe Conservancy Fuel Reduction Program**

The California Tahoe Conservancy (CTC) conducts fuel reduction projects throughout the Lake Tahoe Basin through their Urban Land Management Program.

## **SECTION VI: PRE- FIRE MANAGEMENT TACTICS**

### **DIVISION / BATTALION / PROGRAM PLANS**

#### **North Division**

El Dorado County consists of 459,863 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 residences wanting to live in a rural community.

#### **Battalion 1**

Battalion 1 encompasses approximately 587,545 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 and Local cooperators to reduce these risks.

Battalion 1 is an active Battalion in the Amador-El Dorado Unit regarding vegetation fire response. Additionally, 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 houses two frontline Type III Fire Engine and one reserve Type III fire engine. In addition, it houses the Battalion utility vehicle and the Unit's Mobile Communication Center (MCC). Camino Fire Station was built in 1936 with additions completed in the 1950's and 1960's. It was built for the protection of, and continues to provide service to the surrounding lands owned by private timber companies. The Station shares the compound with the Unit Administrative Headquarters, the Unit Emergency Command Center, the Unit Expanded Dispatch Center, and the Regional DGS Radio Technician Offices. In addition, the facility houses Mt. Danaher Fire Lookout. This lookout is not currently in service, but is registered with the National Historic Lookout Association and is the tallest free standing lookout tower in California.

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



## **El Dorado Fire Station 43 and North Division Automotive Shop**

El Dorado Fire Station 43 houses two Type III fire engines and one Type II Fire Dozer and Transport. It also houses the Dozer Tender Unit and is the Battalion Chief Headquarters. The Fire Station shares the compound and is responsible for the North Division Automotive Shop. This facility includes the Fleet Equipment Managers office and is staffed with one full time mechanic. The shop provides fleet support for all the North Division as well as the staff vehicles at the Unit Administrative Headquarters and assists with support to the Cameron Park Fire Department Schedule A contract.

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 Flat, 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:

- Grizzly Flat FSC
- Logtown FSC
- Pollock Pines FSC
- Pleasant Valley Grange FSC
- Diamond Springs FSC
- Lakehills FSC
- Oak Hill FSC
- Placerville FSC
- Rancho Del Sol FSC
- Sierra Springs Regional FSC
- Texas Hill FSC
- Patterson Ranch FSC
- Royal Equestrian FSC
- Aukum / Fairplay 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 357,725 acres. 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. The majority of 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 residences, 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.

Within Battalion 2, consists of two CAL FIRE stations, Growlersburg Conservation Camp and one staffed Fire Lookout. Growlersburg Conservation Camp, located outside of Georgetown, providing up to five hand crews. Growlersburg Camp provides labor for pre-fire treatment programs in El Dorado County, as well as an invaluable resource on initial attack.

## **Garden Valley Station 50**

Garden Valley Station 50 houses two frontline Type III Fire Engines and is the Battalion Chief headquarters. The original Garden Valley Station 50 was built in 1933 for the protection of and continues to provide service to the surrounding lands owned by private timber companies. The current facility was rebuilt and finished in 2017 in the original location. 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 houses two frontline Type III Fire Engines and one Reserve type III Fire Engine. Pilot Hill Station 70 was built in 1949 on what was then the original CA Highway 49. 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. Pilot Hill Station 70 is responsible for all risk response to areas including Pilot Hill, Cool, Lotus and areas of El Dorado Hills.

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

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

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

The Associate Fire Safe Councils (FSC) which reside within the Battalion 2 Boundaries are:

- Auburn Lake Trails FSC
- Coloma-Lotus FSC
- Cool-Pilot Hill FSC
- Georgetown Divide FSC
- Lakehills FSC
- Mosquito FSC
- Volcanoville FS

## **Central Division**

The newly created (2017) Central Division oversees the administration and operation of the Emergency Command Center, the Training Bureau, the Cameron Park Fire Department Agreement, and the McClellan Reload 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. 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. In addition, one paramedic ambulance is based out of the Cameron Park Fire Department serves the community.

Staffing at the Cameron Park Fire Department consists of up to 18 employees; 1 Battalion Chief-Operations-Administration, 1 Battalion Chief-Fire Marshal-Operations, 2 Fire Captain/Paramedics, 2 Fire Captains, 9 Fire Apparatus Engineer/Paramedics, 3 Fire Apparatus Engineers, Explorer program, and an Firefighter Intern program.

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 the 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

### **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. ROSS and HEMS contain information, such as, the Incident Command System (ICS) qualifications for AEU, ENF, TMU, and cooperators 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 IA 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 and are adjusted based on the size and / or complexity of the incident. The incident can be assigned a separate command frequency which allows the CICC IA floor to return to normal operations. The Expanded ECC allows for timely ordering, cancellation, or reassignment of resources, overhead, and equipment for extended attack and major incidents.

### **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.

### **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 also 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 command 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

## **AEU Wildfire Resiliency Program**

In 2023 CAL FIRE AEU implemented the Wildfire Resiliency Program. This 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, and the unit Pre-Fire Engineer (PFE) captain. The program Battalion Chief serves as a liaison to various wildfire resiliency groups, such as Firewise and Fire Safe Councils, to facilitate community outreach and education. The Battalion Chief also oversees enforcement of state wildfire regulations relating to development and wildfire prevention.

The defensible space inspection program is a crucial element of the AEU Wildfire Resiliency Program. It is responsible for ensuring that homes and properties within the AEU jurisdiction meet the state-mandated defensible space requirements. The program is staffed with five 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 unit has one dedicated PIO. The PIO plays a critical role in ensuring that the public is well-informed during fire incidents and that communication efforts are managed effectively to minimize confusion and misinformation. The PIO is responsible for keeping the public informed about wildfire activity, safety measures, and other relevant information related to the program's objectives as well as acting as the primary point of contact for media inquiries.

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 Defensible Space Program and ensure that defensible space inspections are conducted consistently and effectively.

The Resiliency Program liaison is designed to establish and maintain a relationship between CAL FIRE and various community resiliency programs, such as Firewise. The program seeks to educate and collaborate with these organizations to promote wildfire safety and preparedness within the community. The liaison acts as a resource for information on wildfire prevention, defensible space, and other wildfire regulations. This program aims to foster communication and coordination between CAL FIRE and community groups, and to ensure that both are working together towards the common goal of reducing the threat of wildfire.

The Wildfire Resiliency Program enforces state regulations related to wildfire safety. This includes the California State Minimum Fire Safe Regulations, PRC 4290, 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).

## **McClellan Reload 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.

The 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 Ariel 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 and aircraft deployment is 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.

## **South Division**

Amador County consists of 299,861 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 Lone 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 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 as well as a great travel destination.

### **Battalion 3**

AEU Battalion 3 is 282,349 acres and includes portions of El Dorado and Amador counties. Amador County communities within the Battalion include Pioneer, Pine Grove, Volcano, and Lockwood. El Dorado County communities within the Battalion include Omo Ranch and Mt Aukum. The fuel types in the Battalion range from 45% timber, 48% brush, to 7% grassy oak woodland.

Battalion 3 has a significant wildland-urban interface (WUI) problem. There are several large, densely populated subdivisions within the Battalion that are at risk of a large catastrophic fire occurrence. As a Unit, we are proactively working with several cooperators including residences, Sierra Pacific Industries, Pacific Gas & Electric, Amador Fire Safe Council, Federal and Local cooperators to reduce the risk of a large damaging fire.

Battalion 3 consists of two CAL FIRE Stations, a Conservation Camp, one Fire Lookout, Mount Zion Demonstration State Forest (164 acres) and the North Mokelumne Demonstration State Forest (1,065 acres). Pine Grove Station, located in Pine Grove, is staffed with two Type III engines and a Battalion Chief, Dew Drop Station, located east of Pioneer, is staffed with one Type III engine. Dew Drop station is also staffed with an engine from the El Dorado National Forest during fire season. Pine Grove Youth Conservation Camp provides four (4) Type I hand crews. Pine Grove Camp Crews provide hundreds of hours of work on fuel reduction and vegetation management projects to the communities in Amador County, as well as an invaluable resource on initial attack.

The Mount Zion Lookout Tower and the Mount Zion State residence were completely remodeled in 2021. Since 2020 Mount Zion Lookout has been staffed with VIP's and will continue to be staffed every fire season.

Other fire agencies that are located within the boundaries of Battalion 3 include:

- 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 is 650,424 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 to large catastrophic fires. As a Unit, we are proactively working with residences, 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, the Unit's Service Center, 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
- Lone 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, Lone, 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 also 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. All wildland fire protection on State Responsibility Area lands within Alpine County is by agreement (CFMA) with the Eldorado and Humboldt-Toiyabe National Forests. Alpine county is largely made up of Federal National Forest and designated Wilderness Area lands. CAL FIRE does however continue to retain the primary administrative responsibility for the State Responsibility Area in Alpine County. The total area of the Battalion is approximately 800,000 acres and is comprised of mostly high-altitude conifer stands common to the high elevation (5,000 – 10,000+ feet) Sierra Nevada Mountains. The primary fuel type of the State Responsibility Area is Jeffery Pine Mixed Conifer Forest, Pinyon-Juniper, and East Side Sage Brush.

There is little doubt that the public's, as well as our cooperators, expectation is that we will be an integral component of the fire service community in the Lake Tahoe Basin and Alpine County on a year-round basis.

## **Lake Tahoe Fire Station 5**

On June 1, 2013, 33,000 acres of 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 began staffing two fire engines in the Basin. 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. As of 2021, Cal Fire was given authorization to start up two (2) CCC crews to help with fuels reduction projects and fire suppression duties from Meyers Station in South Lake Tahoe.

## **Tahoe Fire Center**

On May 3, 2021, CAL FIRE began the implementation of two (2) CCC Fire Crews to bolster the number of hand crews available for fuels reduction projects and fire suppression response. The Tahoe Fire Center consist of 2 Battalion Chiefs, 7 Fire Captains and 2 crews, each staffed with 15 Corp members. The Center provides crew availability 7 days a week, actively engaged with state and local cooperators in fuels reduction and vegetation management projects.

CAL FIRE personnel working in the Tahoe Basin enjoy a close working relationship with surrounding local government and federal fire agencies. CAL FIRE has Direct Fire Protection responsibility in the Tahoe Basin; therefore, these relationships are vital to the success of the program. In addition to responding to all risk emergencies, Lake Tahoe Station 5 is very proactive in public education and defensible space inspections within the surrounding community. In addition, the Battalion maintains a close working relationship with the federal land management agencies including the USDA Forest Service and the USDI Bureau of Land Management.



The Lake Tahoe CAL FIRE station also works closely with the 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 the LTCC.

Given recent wildfire activity, current trends in the Lake Tahoe Basin towards prioritizing fuels reduction projects that will protect SRA lands and increase forest resiliency, and efforts to develop fire-adapted communities, CAL FIRE has the potential to be well positioned to support these on-going initiatives through development of adequate infrastructure. This will require building a modern facility with additional room to accommodate fire engines, firefighter hand crew(s), additional cover resources during periods of high fire danger (engines and dozers), and sufficient office capacity for CAL FIRE support staff.

It is important to note, over the next several years more State land within CAL FIRE's core protection area will be added because of a land exchange between the State and the USFS, authorized with the passage of the Lake Tahoe Restoration Act (LTRA) by Congress in 2016. The Act also approved up to \$150 million dollars in funding for additional fuels reduction and forest thinning projects, biomass programs, competitive grants, stewardship contracts, municipal firefighting water supply upgrades and updates of strategic fuels reduction and fire prevention guidance documents. These community and resource protection initiatives are aligned with CAL FIRE's mission and strategic goals.

### **Tahoe Fire and Fuels Team (TFFT)**

The Tahoe Fire and Fuels Team vision is to establish proper forest management that reduces the threat of catastrophic wildfire, and proactively inform and educate the public on how to protect lives, communities, property, and the exceptional natural resources of Lake Tahoe. The Mission Statement of the TFFT is "To protect lives, property and the environment within the Lake Tahoe Basin from wildfire by implementing prioritized fuels reduction projects and educating the public on becoming a Fire Adapted Community." Nearly all fuels reduction hazard work is coordinated through the TFFT.

Additionally, the TFFT is coordinating the following SNPLMA funded hazardous fuels reduction projects and wildfire prevention projects within Battalion 6 over the next 1-2 years:

- 1) Urban Lot Fuel Reduction
- 2) Hazardous Fuel Reduction surrounding Water Delivery infrastructure
- 3) Vikingsholm Water Infrastructure improvement
- 4) Shaded Fuel Break Demo Project- Golden Bear subdivision
- 5) Washoe Meadows State Park

The Forest Service, Lake Tahoe Basin Management Unit, will reduce hazardous fuels and improve forest health on approximately 3,418 acres of National Forest System lands in the wildland urban interface of Placer and El Dorado Counties, California, and Washoe, Carson, and Douglas Counties, Nevada. The project will reduce the wildfire threat to communities, watersheds, and natural resources.

- 6) LTBMU Caldor Fire restoration

The Tahoe Resource Conservation District will deliver a coordinated Fire Adapted Communities program, including extensive community outreach and assistance that will result in increased wildfire preparedness participation. The project will improve fire defensible space near private structures by treating 870 acres of private property. Additionally, chipping and chip removal projects across 550 acres will occur in the Lake Tahoe Basin communities where fuel reduction projects are planned in the adjacent wildland urban interface.

Wildland fire prevention programs in the Tahoe Basin are intended to reduce the chance of fire starting on private property by reducing fire fuels near private structures. At the same time, the efforts are intended to increase the resilience of the landscape in the transition from private lands to public lands. The project implements priority actions in the Lake Tahoe Basin Community Wildfire Protection Plan, and covers the wildland-urban interface for all Lake Tahoe Basin fire protection districts and departments.

- 7) California Lake Tahoe Basin Regional Hazardous Reduction and Wildfire Prevention (California Tahoe Conservancy)

The California Tahoe Conservancy and proposal partners will facilitate hazardous fuels reduction treatments on at least 1,200 acres and not more than 1,800 acres of the highest priority private property from the 3,000 acres identified in the regional focus areas within the Defense Zone of the wildland urban interface on the California side of the Basin. These treatments will improve forest health and reduce the threat of catastrophic wildfire, protecting life and property of the residents and visitors to the Basin.

- 8) Programmatic Timberland Environmental Improvement Report (Lake Valley Fire Protection District)

The Lake Valley Fire Protection District will coordinate all the necessary entities and efforts needed to complete the Programmatic Timberland Environmental Improvement Report for all private, local government, and California Tahoe Conservancy fuel reduction projects as identified in the Community Wildfire Protection Plans. The intent of this project is to streamline the permitting processes for these projects, which will save project proponents and permitting agencies valuable time, resources and money. Additionally, the project will provide a comprehensive analysis of the cumulative effects.

### **Continued Development of Fire Adapted Communities**

The Fire Adapted Community (FAC) program encourages communities to be aware of local wildfire hazards, act to reduce their vulnerability to these hazards, inform the public of environmental and socio-economic benefits of being a part of a FAC network, and inspire others within neighboring areas to prepare their communities for the occurrence of wildfire. Information distributed to communities encourages owners of structures and property in the SRA to lower their risk by staying informed, creating defensible space, reducing and removing fuels within the SRA, and understanding their effects on the environment. When a FAC accomplishes these actions, the risk of wildfire is reduced at a larger scale because the entire community is working together to create and maintain a regional approach to preparing for the occurrence of wildfire.

Fire Adapted Community Coordinator's (FACC) will be identified in communities around the Lake. The FACC is responsible for transparent, open communication with community members, fire districts and partner agencies within the Lake Tahoe Basin. The FACC is tasked with establishing fire-adapted neighborhoods through community engagement and collaboration with Fire Districts and partner agencies within the Lake Tahoe Basin. Examples of these types of actions include, but are not limited to, creating and maintaining defensible space, developing evacuation plans, or hosting fire related block parties to keep individuals educated and informed.

The FACC will participate and utilize the TFFT Fire Public Information Team to assist in disseminating information about fire-adapted communities and other fuel reduction projects within the Lake Tahoe Basin. The FACC will engage with the Fire Adapted Communities Learning Network to learn strategies from other FAC networks within the nation and bring appropriate practices to the Lake Tahoe Basin.

## **Defensible Space Inspections**

Traditionally in the Amador-El Dorado Unit, defensible space inspections in Tahoe have occurred between May and October with limited inspections occurring during the winter preparedness period. This is due to weather as well as staffing levels of our engine companies and the ability to hire Forestry Aide/Defensible Space Inspectors between the months of April and November. Much of inspections occur May through August. During the months of September and October inspections continue, however, the focus is mainly on re-inspections to gain compliance. Throughout the year, it is the intent to adapt our inspection process to be consistent with Fire PIT messaging and CAL FIRE's "Ready, Set, Go" program.

Fire Station personnel conduct Defensible Space Inspections within the target hazard areas identified by their Battalion Chief. During high fire danger, a cover engine will be requested to backfill if the Station 5 engine is going to be on an extended delay from the Lake Tahoe Basin.

Each year the Unit is authorized to hire Forestry Aides to conduct Defensible Space Inspections. The number of Forestry Aides and the months available varies each year and is dependent on SRA Fire Prevention Fee funding. The Forestry Aides are responsible for contacting residents and sending letters (Absentee Landowner Letters, Passing Letters, Fail Letters) based on the outcome of the inspection. A list of approved TRPA contractors is also provided. It is our policy to make every effort to have positive contact with the resident or homeowner; however, given the large number of second homes in the Basin, this can be challenging. The large majority of inspections are completed every year by our dedicated inspectors.

## **Lake Tahoe Basin Tree Mortality Task Force**

Unprecedented drought and the resulting bark beetle infestations across large regions of the Sierra are posing a grave threat to the forests in the Lake Tahoe Basin. Basin organizations and stakeholders have formed the Lake Tahoe Basin Tree Mortality Task Force to implement measures to help prevent large-scale infestations and actively treat infested areas at risk of tree mortality. The Lake Tahoe Tree Mortality Task Force strategy will be integrated with existing efforts to increase the pace and scale of forest fuels and restoration projects across Basin landscapes and jurisdictions to create healthier, more resilient forests and remove dead and dying trees to protect lives and property.

The United States Forest Service, Tahoe Regional Planning Agency and Tahoe Fire and Fuels Team will lead the Task Force to develop and implement detection, prevention, permitting, funding, utilization, and public outreach strategies and to be liaisons with county and statewide tree mortality efforts in both California and Nevada.

## **Lake Tahoe West Restoration Partnership**

Lake Tahoe West is an interagency, multi-jurisdictional initiative that includes stakeholder participation and a science team. Its primary goal is to restore and maintain the resilience of the forests, watersheds, recreational opportunities, and communities on Lake Tahoe's western shore within 10 years. Resilience refers to managing the landscape in ways that enhance its capacity to withstand drought, climate change, uncharacteristically high tree stand density, increased visitor use, bark beetles, uncharacteristic wildfire, and other stressors, without the loss of its ecological processes and its cultural and economic values. Management may include, for example, activities that address uncharacteristic tree stand density and fuels conditions, improve habitat, and increase the moisture-holding capacity of soils.

The initiative's secondary goal is to develop an approach to landscape restoration that can be replicated in and customized to the north, east, and south shores of the Lake Tahoe Basin, and the Sierra Nevada generally.

Phases of Lake Tahoe West include (1) assessing the landscape and identifying the highest priority areas for restoration; (2) developing a multi-jurisdictional landscape restoration strategy, based on scientific modeling and deliberation of several potential management approaches; (3) planning a corresponding restoration project or series of projects; (4) permitting the project(s); and (5) implementing, monitoring, and improving the project(s) over time. Phases 1-3 will take two to three years, and Phases 4-5 will take around seven years to complete. The largest amount of stakeholder work will occur during the first three years.

## **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 and the Chief of Bioenergy, Greenhouse Gas, and Climate Change work from this facility.

## **Lake Tahoe Basin Fire Agencies:**

### Federal Fire Agencies

- U.S.F.S Lake Tahoe Basin Management Unit

### **State Fire Agencies**

- Amador-El Dorado Unit CAL FIRE
- Nevada-Yuba-Placer Unit CAL FIRE
- Nevada Division of Forestry

### **Local Fire Districts**

- 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

### **Local Government Fire Departments**

- South Lake Tahoe Fire Department

## **Alpine County Fire Agencies:**

### Federal 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

### **State Fire Agencies**

- Amador El Dorado Unit CAL FIRE

### **Local Fire Districts/Departments**

- Eastern Alpine County Volunteer Fire Department
- Kirkwood Fire Department

### ***Community Wildfire Protection Plans (CWPP) in the Battalion:***

- Lake Tahoe Basin CWPP
- Alpine County CWPP
- Fire safe Council

### **Sacramento County**

Sacramento County consists of 119,248 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.

### **Alpine County**

Alpine County consists of 474,265 acres and is entirely Federal DPA. However, 36,959 of those acres are private lands making them SRA (approximately 13%). 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).

### **San Joaquin County**

San Joaquin County consists of 24,888 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.

**APPENDIX A: PRE- FIRE PROJECTS**

<b>Pre-Fire Projects-Fire Plan</b>	<b>Treated Acres</b>	<b>Unit</b>	<b>Projects</b>	<b>Broadcast Burn</b>	<b>Fuel Reduction</b>
AFSC Mitchell Mine Fuelbreak	0	0	3.4	0	3.4
California Tahoe Conservancy	0	6.6	0	0	6.6
Dew Drop Station FR	0	4.8	0	0	4.8
El Dorado County SRA Roads	0	0	0	8.9	8.9
Fallen Leaf FD	0	0	0	16	16
Growlersburg RX	35.6	0	0	0	35.6
Indian Grinding Rock State Park	0	2.7	0	0	2.7
Pine Hill BLM	0	2	0	0	2
Pine Hill Preserve	0	0.99	0	0	0.99
South Lake Tahoe FR	0	5.78	0	0	5.78
State Parks Alpine FR	0	11	0	0	11
State Parks Gold Fields	0	38.8	0	0	38.8
State Parks Tahoe Basin FR	11.7	31.34	0	0	43.04
Sutter Hill Station	4.4	0	0	0	4.4
<b>Total</b>	<b>51.7</b>	<b>104.01</b>	<b>3.4</b>	<b>24.9</b>	<b>184.01</b>
<b>Pre-Fire Projects-Forest Health</b>	<b>Treated Acres</b>	<b>Unit</b>	<b>Projects</b>	<b>Broadcast Burn</b>	<b>Fuel Reduction</b>
California State Parks Forest Health	13.74	245.54	0	0	259.28
FA 50 Phase IB - WFPP	0	303.6	0	0	303.6
TCSI El Dorado/French Meadows	0	121.7	0	0	121.7
<b>Total</b>	<b>13.74</b>	<b>670.84</b>	<b>0</b>	<b>0</b>	<b>684.58</b>
<b>Pre-Fire Projects-VMP Projects</b>	<b>Treated Acres</b>	<b>Unit</b>	<b>Projects</b>	<b>Broadcast Burn</b>	<b>Fuel Reduction</b>
2017 Sly Park VMP	0	66.25	0	0	66.25
Amoruso VMP	98	67.31	0	0	165.31
Georgetown Divide Comp. 2015 VMP	130.9	76.9	0	0	207.8
Lyon VMP	81.46	0	0	0	81.46
Pine Acres VMP	0	31.8	0	0	31.8
Sac Valley Conservancy 2020 VMP	478	0	0	0	478
Shake / Omo VMP 2019	36.9	45.17	0	0	82.07
Shake/Fiddletown 2017	17.3	0.7	0	0	18
Van Vleck / Shooting Center 2016	157	0	0	0	157
<b>Total</b>	<b>999.56</b>	<b>288.13</b>	<b>0</b>	<b>0</b>	<b>1287.69</b>
<b>Grand Totals</b>	<b>1,065</b>	<b>1,062.98</b>	<b>3.4</b>	<b>24.9</b>	<b>2,156.28</b>

Note: With the passing of AB 398, SRA Fees have been suspended for 10 years. Funding for future projects will come from Climate Change Initiative funds and an extension of the cap and trade program beginning in 2018

## **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's the Battalion, 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 95% of Battalion 1 is rated as high or extreme in SRA fire severity ratings.

### **Battalion 1 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 2<sup>nd</sup> 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 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 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 2023 for Vegetation Management and Live Fire training purposes.



## **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. The Good Neighbor Authority agreement is a 5-year agreement which shall terminate on June 15, 2021.

### **Community Wildfire Protection Plans (CWPP) in the Battalion:**

- Highway 49 El Dorado County CWPP
- Diamond Springs/El Dorado CWPP
- Highway 50 Corridor CWPP
- Royal Equestrian CWPP
- Grizzly Flat CWPP
- Logtown CWPP

### **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 Projects**

#### **Auburn Lake Trails Fire Safe Project / CWPP**

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 the 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.

## **Lyons 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.

## **EI Dorado County Road Clearance (CCI Funded – CAL FIRE and DOT)**

CAL FIRE and EI Dorado County DOT are using SRA Fee Funds in a cooperative effort to remove road side 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.

## **EI Dorado County CWPP Revision (SRA Fee Funded - EI Dorado County FSC Fiscal Sponsor)**

The proposed project will create an Integrated EI Dorado County Community (County) Wildfire Protection Plan (CWPP). The project is needed to consolidate several individual CWPPs into a single comprehensive document that is consistent with the County fire plan.

## **American River Canyon Perimeter Shaded Fuel Break (SRA Fee Funded - 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.

## **South Fork of the American River Fuel Reduction (SRA Fee Funded – American River Conservancy Fiscal Sponsor)**

CCC Crews will work on the implementation of a fuel reduction project at the Wakamatsu Colony Farm in the South Fork of the American River watershed. The project will take place on approximately 10 acres of densely vegetated live oak woodland.

## **Battalion 2 Hazard/ Target Areas**

The entire area covered within Battalion 2 would be considered a Target Area with significant potential. As noted earlier, the Divide has a significant fire history that has proven to challenge fire suppression efforts over the years. With the increase in population on the Divide, the potential for increased ignitions are ever growing. Some Target Areas include but are not solely limited to:

- Community of Mosquito
- Community of Garden Valley and surrounding communities
- Community of Georgetown and surrounding communities
- Community of Rescue
- Communities of Coloma/ Lotus
- Auburn Lake Trails
- Major travel corridors
- American River Drainage
- Coloma State Park

### ***Community Wildfire Protection Plans (CWPP) in the Battalion:***

- Volcanoville CWPP
- Auburn Lake Trails CWPP
- Georgetown CWPP
- Auburn Lake Trails CWPP
- Lakehills & Southpointe CWPP

### **Future Battalion 2 Projects:**

Future projects within the boundaries of Battalion 2 should focus on the following areas:

- Continued work on the ALT Fuels project including roadside clearing and ALT greenbelt/ common space areas.
- VMP's with major landholders to reduce fire hazards and noxious weeds (Bacchi, Lewis, and Baer).
- Input and support of the five noted CWPPs.
- Continuous Defensible Space inspection program (PRC 4291) in target hazard areas.

As opportunities present themselves, we plan to accomplish these goals through CWPPs, Fire Safe Council collaborations and grants as well as working with Cal Trans and County Roads to provide roadside clearances along all major routes of travel on the Divide.

- Hwy 49 corridor
- Hwy 193 corridor
- Rock Creek Road
- Mosquito Road
- Sliger Mine Road
- Marshall Grade Road

## **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 on 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 road side 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
- Sutter Creek Volcano Road
- Lupe Road
- Clinton Road
- Pioneer Creek Road
- Tiger Creek Road
- Ridge Road
- Hale Road

### **Buckhorn Ridge Project**

The Buckhorn Ridge Project consisted of several different projects in the community of Pioneer. The project was a cooperative effort between BLM, CAL FIRE. Crews from Pine Grove Camp completed fuels treatment on BLM property along Buckhorn Ridge Road. CCI funded engine crews and crews from Pine Grove Camp to cut and treat dead trees around the Pioneer Parks. Amador County Recreational Agency (ACRA) lands around Mollie Joyce Park and South of Highway 88. This work was funded by ACRA and the Amador County Board of Supervisors and was completed by crews from Pine Grove Camp. Road clearing was completed along Pioneer Creek Road, funded by SRA Fee money.

### **Buckhorn Ridge Hazard Tree Abatement (CCI Funded-Amador Resource Conservation District)**

The current project is intended to bring financial relief to the homeowners in the Project Area by providing them with a 33% cost share against the total cost to abate their hazard trees. This incentive is expected to accelerate the removal of 420 dead trees in the subdivision and clear the hazard trees from 84 - 420 homes.

### **Mt Zion State Forest Hazard Tree Removal (CCI Funded-Partially)**

SRA funded engine crews and equipment, and crews from Pine Grove Camp will be removing bug killed trees from Mt Zion State Forest. The slash will be burned or chipped using SRA funded chippers.

### **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.

### ***Community Wildfire Protection Plans (CWPP) in the Battalion:***

- Pioneer-Volcano CWPP
- Pine Grove CWPP
- High County CWPP

### **Future Battalion 3 Projects**

#### **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. This project includes fuels treatment on the Indian Grinding Rock State Park, BLM property and on Mitchell Mine Road and Lupe Road.

#### **Tiger Creek 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 to facilitate ingress/egress and route clearing.

#### **Continuous Maintenance**

We will continue to work cooperatively with the County of Amador and The Amador County Fire Safe Council to explore funding options to maintain all past and ongoing fuels reduction projects. These projects will continue to be prioritized in the respective CWPPs.

### **Battalion 4 Projects**

Within Battalion 4 a strong emphasis is placed on projects which involve fire preparedness training. Logistical and training support is provided to the CAL FIRE Academy in Lone and to the AEU training program with the following 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. **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 "backed" 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.

2) 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 of 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 Public Utility District Fire Prevention Plan (SRA Fee Funded - River Pines Public Utility District Fiscal Sponsor)**

River Pines Public Utility District Fire Prevention Plan 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 road side 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
- Quartz Mountain Road
- Shake Ridge Road
- Clinton Road
- Butte Mountain Road
- Middle Bar Road

**Future Battalion 4 Projects:**

**Butte Fire Burn area:**

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

**Sutter Highlands:**

In the late 1990's fuel reduction work was completed in the Sutter Highlands area east of the City of Sutter Creek. We will work with residences and local agencies to develop a plan and re-establish the fuels work in the Sutter Highlands area.

**East Division Projects (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. The following list represents the various fuels reduction, defensible space inspection, and support projects located within Battalion 6:

PROJECT ID	NEW OR CONTINUED FROM 2014	METHOD	SIZE	FUNDING SOURCE	AGENCY	OWNERSHIP
Lake Valley Defensible Space Inspections	C	Defensible Space Inspections	250 Parcels	FEMA Roof	LVFPD	Private
CSLT Defensible Space Inspections	C	Defensible Space Inspections	40 Parcels	Private	LVFPD	Private
Lake Tahoe Community Chipping	C	Chipping	300 Parcels	CAL FIRE SRA	TRCD/LVFPD	Private
CTC Sunset Aspen	N	Hand Thin	8	TRPA	CTC/CCC	CTC
CTC Angora Highlands	C	Hand Thin	4	CTC Direct	CTC/TRCD	CTC
CTC Angora Highlands	C	Chip	4	CTC Direct	CTC/TRCD	CTC
CTC Golden Bear	N	Hand Thin	6	CTC Direct	CTC/TRCD CCC	CTC
CTC Golden Bear	N	Chip	6	CTC Direct	CTC/TRCD CCC	CTC
Eagle Point 1	N	Pile Burn	26	CAL PARKS	CAL PARKS	CAL PARKS
CAL FIRE Defensible Space Inspections- Area 1	N	DSI	1,079 Parcels	CAL FIRE SRA Fee	CAL FIRE AEU	Private
CAL FIRE Defensible Space Inspections- Area 2	N	DSI	1,380 Parcels	CAL FIRE SRA Fee	CAL FIRE AEU	Private
CAL FIRE Defensible Space Inspections- Area 3	N	DSI	483 Parcels	CAL FIRE SRA Fee	CAL FIRE AEU	Private



CAL FIRE Powerline Inspections Target Hazard Area 1	N	Powerline Inspections	12 Miles	CAL FIRE SRA Fee	CAL FIRE AEU	Private
CAL FIRE Powerline Inspections Target Hazard Area 2	N	Powerline Inspections	13 Miles	CAL FIRE SRA Fee	CAL FIRE AEU	Private
CAL FIRE Powerline Inspections Target Hazard Area 3	N	Powerline Inspections	4 Miles	CAL FIRE SRA Fee	CAL FIRE AEU	Private
Urban Forest Fuels Reduction-ULEA-Heavenly Area D-Space	N	Hand Thin	90	SNPLMA	USFS/CCC GBI	USFS
Urban Forest Fuels Reduction-ULEA-Heavenly Area D-Space	N	Pile Burn or Chip	90	SNPLMA	USFS/CCC GBI	USFS
Urban Forest Fuels Reduction-SSEIS-Sawmill Road	N	Hand Thin	10	SNPLMA	USFS/CCC	USFS
South Shore Fuels Reduction-Homer J. CTL Stewardship	C	Mechanical Thin	363	SNPLMA	USFS	USFS
South Shore Fuels Reduction-Spider Pig Whole Tree Stewardship Contract	C	Mechanical Thin	275	SNPLMA	USFS	USFS
Meeks Bay DSI	C	DSI	250 Parcels	MBFPD	MBFPD	Private
CAL FIRE Alpine County Defensible Space Inspections	C	DSI	250 Parcels	CAL FIRE AEU	CAL FIRE AEU	CAL FIRE AEU

**Community Wildfire Protection Plans (CWPP) in the Battalion:**

- Lake Tahoe Basin CWPP
- Alpine County CWPP

## **APPENDIX B: UNIT GOALS AND OBJECTIVES**

**Goal 1:** Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the sharing of all analyses and data collection across all ownerships for consistency in type and kind.

**Objectives:** Engage and participate with local stakeholder groups (i.e., fire safe councils and others) to validate and prioritize the assets at risk.

**Goal 2:** Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

**Objectives:** Increase the number and effectiveness of defensible space inspections and promote an increasing level of compliance with defensible space laws and regulations by CAL FIRE staffing as available, public and private organizations, and alternative inspection methods.

**Goal 3:** Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

**Objectives:** Support the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources, as well as public and private sector resources, for fuels management activities, including ongoing maintenance. Both Growlersburg and Pine Grove camps are key contributors to the success of AEU's ongoing VMP, CFIP, and SRA Fire Prevention Fee projects.

## **APPENDICES C-Z**

### **APPENDIX C**

#### **Unit Specific Plans**

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

#### **Fire Danger Operating Plan**

This National Fire Danger Rating System Fire Danger Operating Plan discusses the setup and management of the National Fire Danger Rating System (NFDRS) fire danger modeling program for the Amador-El Dorado Unit (AEU). Fire danger is only one factor affecting operational decision making. The analysis framework used to develop this operating plan tries to account for the weather, fuels and topography driven factors as they affect fire danger and burning conditions throughout AEU. This analysis framework does not necessarily account for other factors such as resource draw down, training levels, political factors, mutual aid status, over riding budget constraints, and other pertinent issues. AEU created a Fire Weather Working Group charged with the creation and maintenance of this plan. Individuals with specific expertise were selected to work towards a Unit wide operating plan that fulfills the objectives set forth by the California Department of Forestry and Fire Protection.

#### **AEU Complex Incident Plan**

The Amador-El Dorado Unit Complex Incident Plan has been created to guide Unit operations, and support personnel, during lightning, and other complex incidents. Lightning events are an example of an incident that can become especially overwhelming for the Unit and the Emergency Command Center (ECC). Lightning complexes can tax the daily ECC operations as the complexity of the event increases. The intent of this plan is to establish, and maintain, a seamless flow of resource dispatching, ordering and accountability. Preparation of this plan was originally prepared with the intent of managing lightning incidents; however, it is recognized that it can be activated for any incident that presents similar demands on the Unit and ECC. This plan is designed as an outgrowth of the Incident Command System (ICS) using the standard organizational elements to cover geographic areas that are impacted by lightning or any other emergency incident that exceeds the operational control of the Unit ECC.

#### **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**

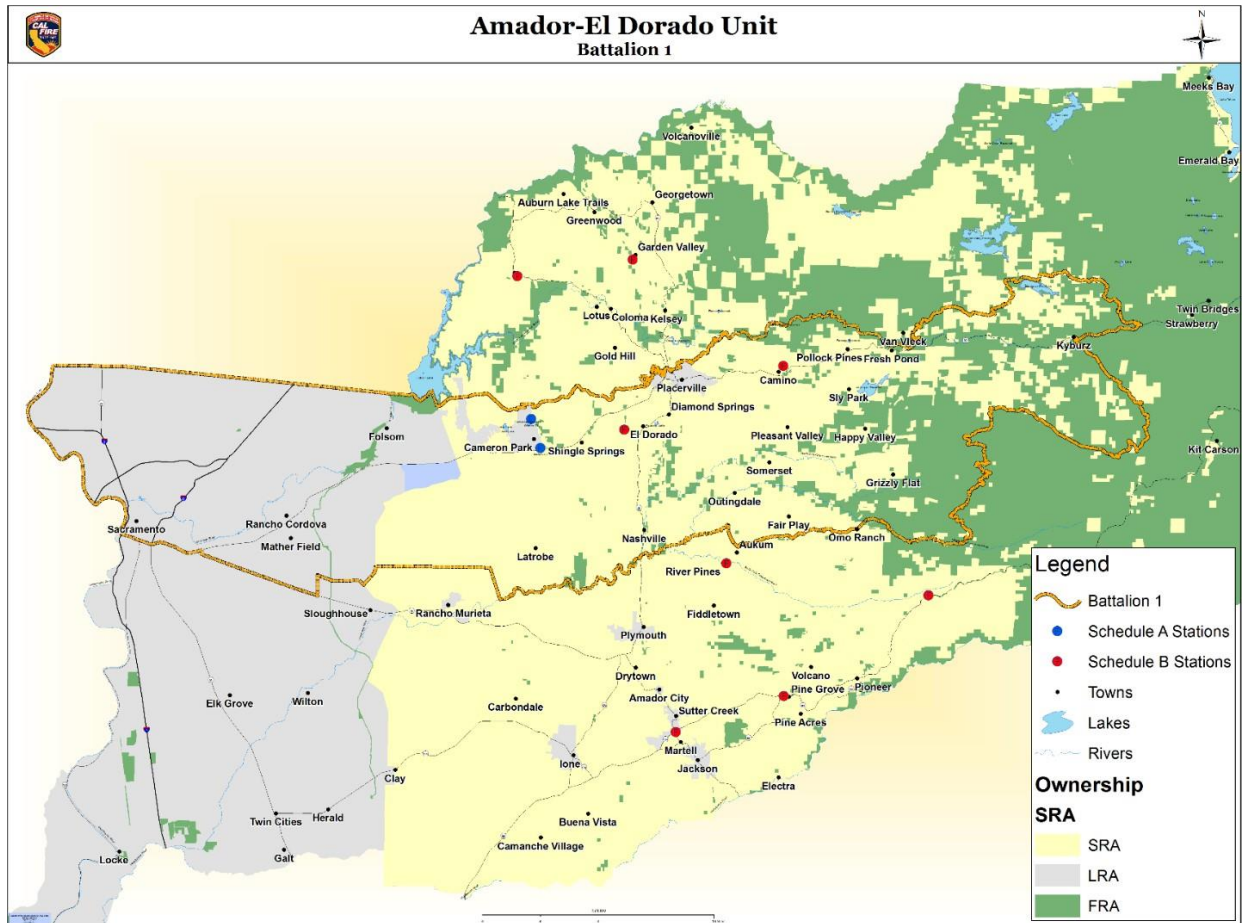
This Defensible Space Inspection Plan outlines the objectives, goals, and direction for Field Personnel and Forestry Aide / Forestry Technician Defensible Space Inspectors in carrying out PRC 4291/LE 100(a) Defensible Space Inspections. In light of California's recent fire history, fire prevention activities 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 2,250 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 inspections have traditionally been conducted between April and November, with limited inspections during the winter preparedness period. The Wildfire Resiliency Program intends to adapt the Unit's inspection process to align with the "Ready, Set, Go" program, which includes a consistent year-round inspection process by Unit engine companies and defensible space inspectors. The Unit's ability to do so will depend on maintaining engine staffing levels year-round and hiring/maintaining Greenhouse Gas Reduction funded Forestry Technicians year-round.

Field Battalion Chiefs will identify target hazard areas within their individual geographic areas of responsibility to conduct 4291 Defensible Space inspections for that year. The Battalion Chiefs shall submit the target hazard areas for that year and the prior years' completed inspection maps to the Unit's Pre-Fire Engineer. The Pre-Fire Engineer will create target hazard area maps that will be distributed to Battalion Chiefs, Fire Stations, Forestry Aide/ Forestry Technician Defensible Space Inspectors, and local cooperators. Battalion Chiefs consider factors such as call volume, structural density, evacuation concerns, Fire Hazard Severity Zone rating, fire history, and others when determining target hazard areas for defensible space inspections.

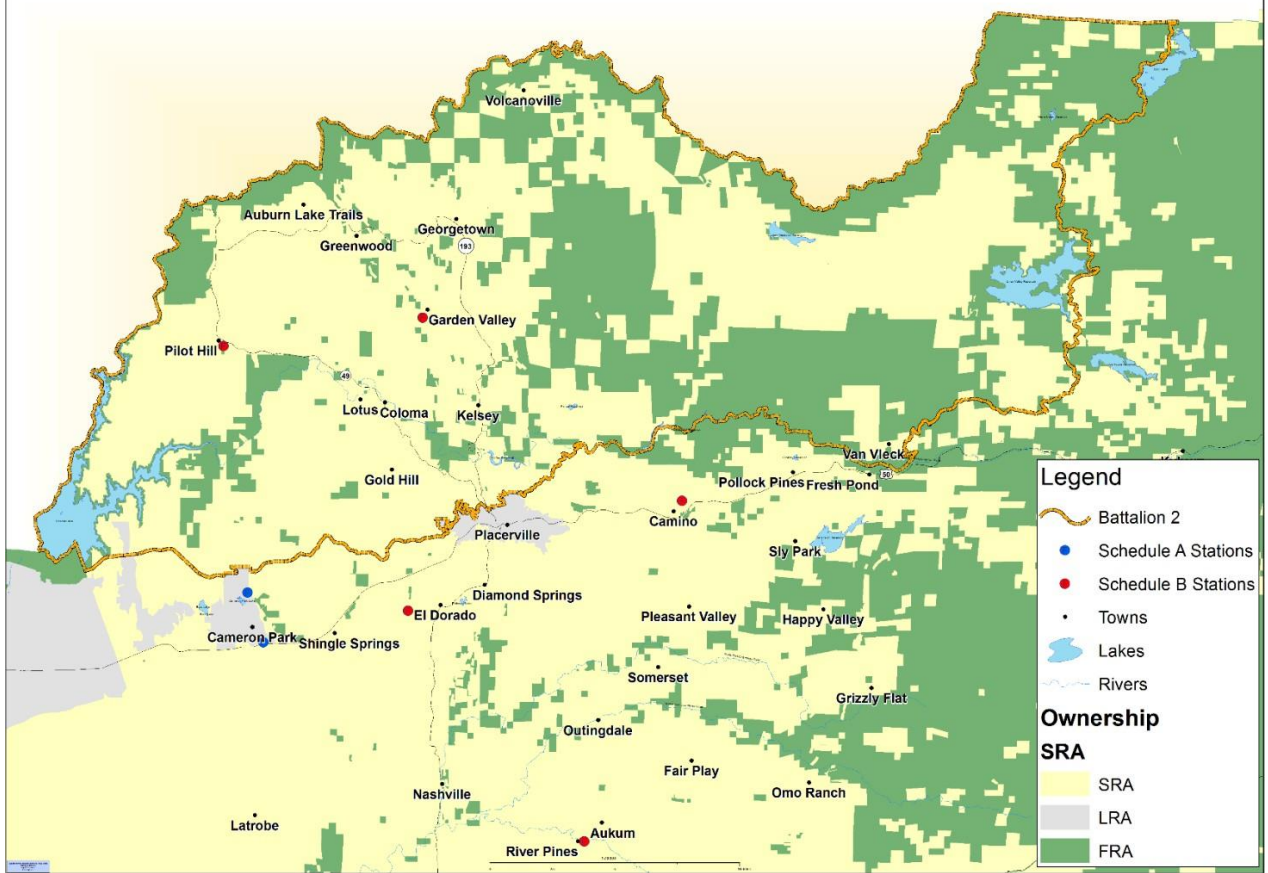


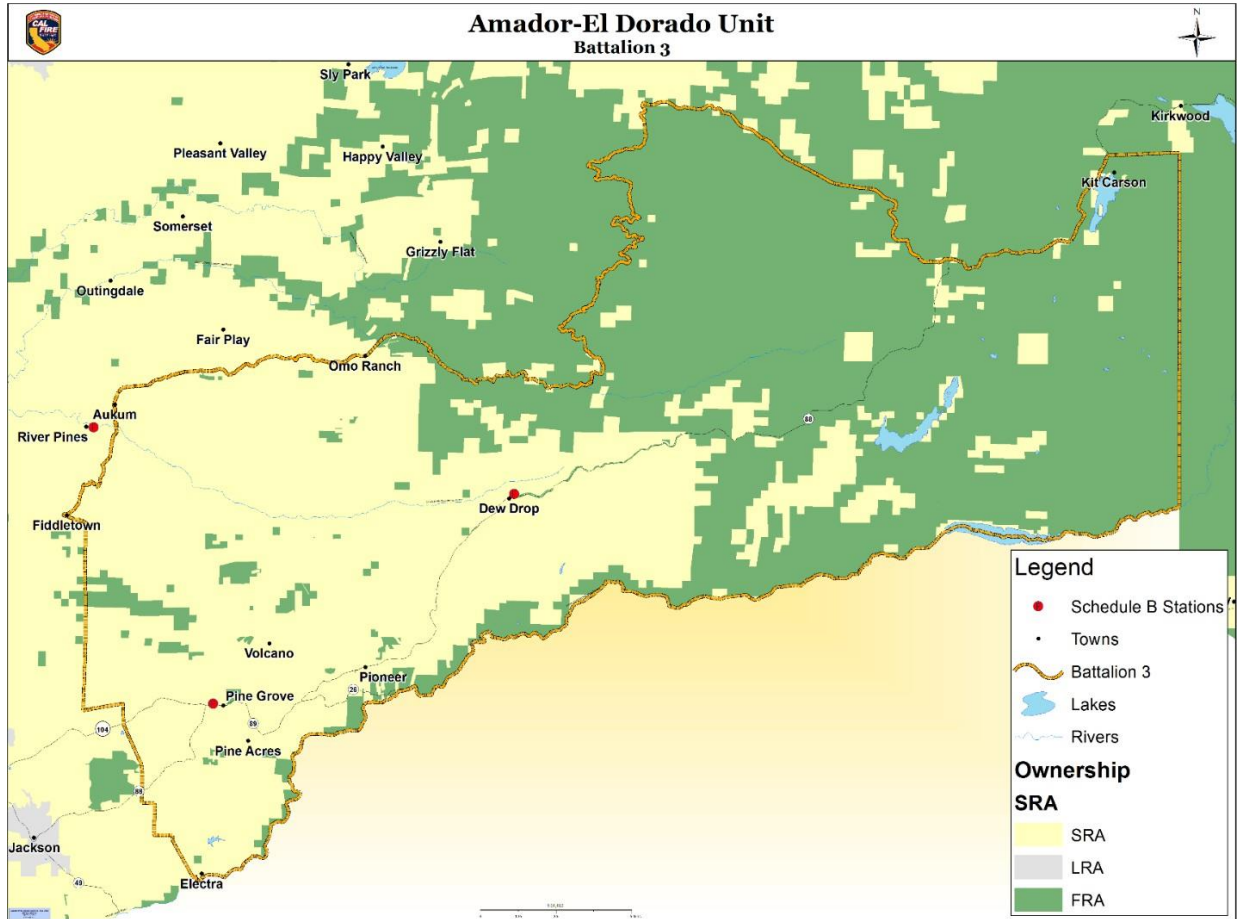
Figure B: Battalion Maps



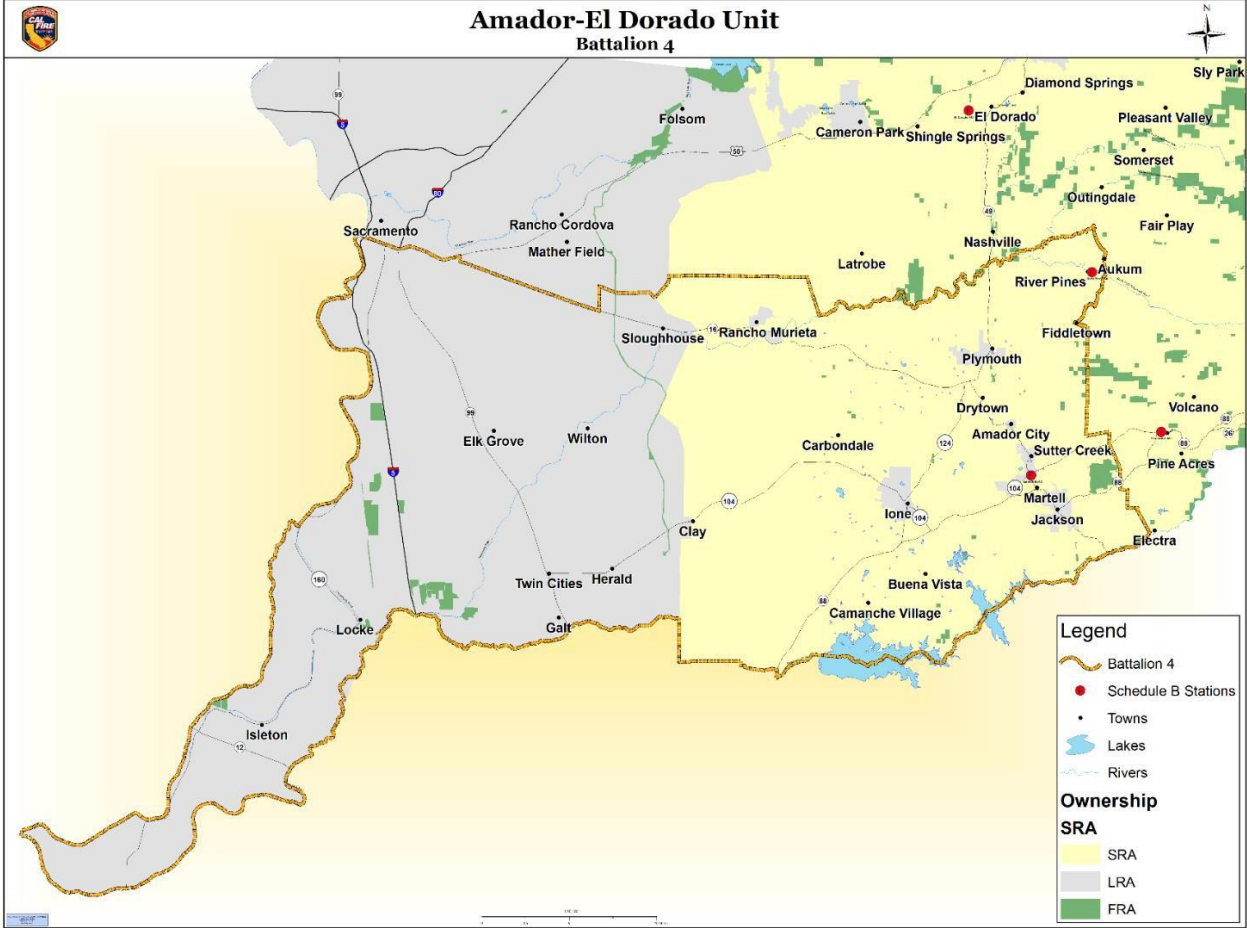


# Amador-El Dorado Unit Battalion 2



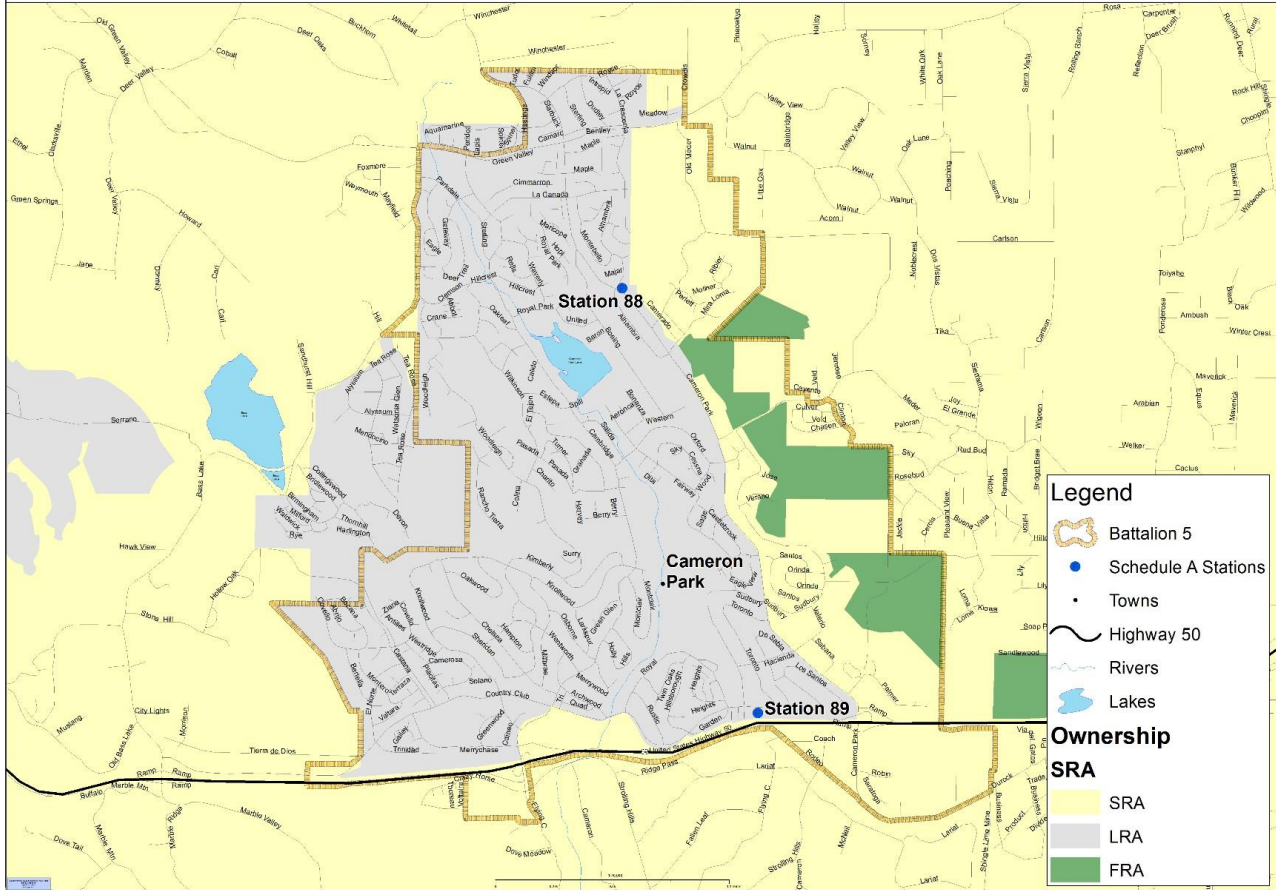








# Amador-El Dorado Unit Battalion 5





# Amador-El Dorado Unit Battalion 6

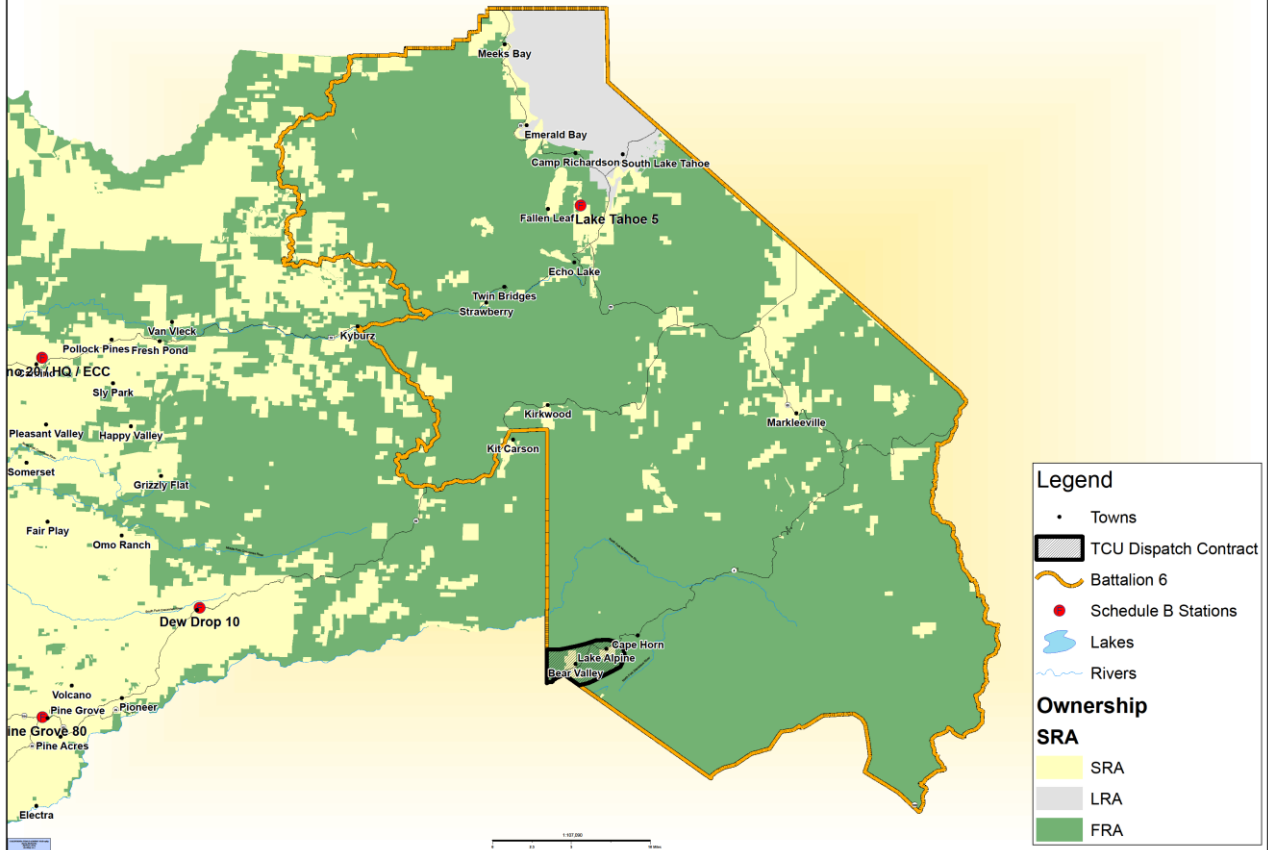
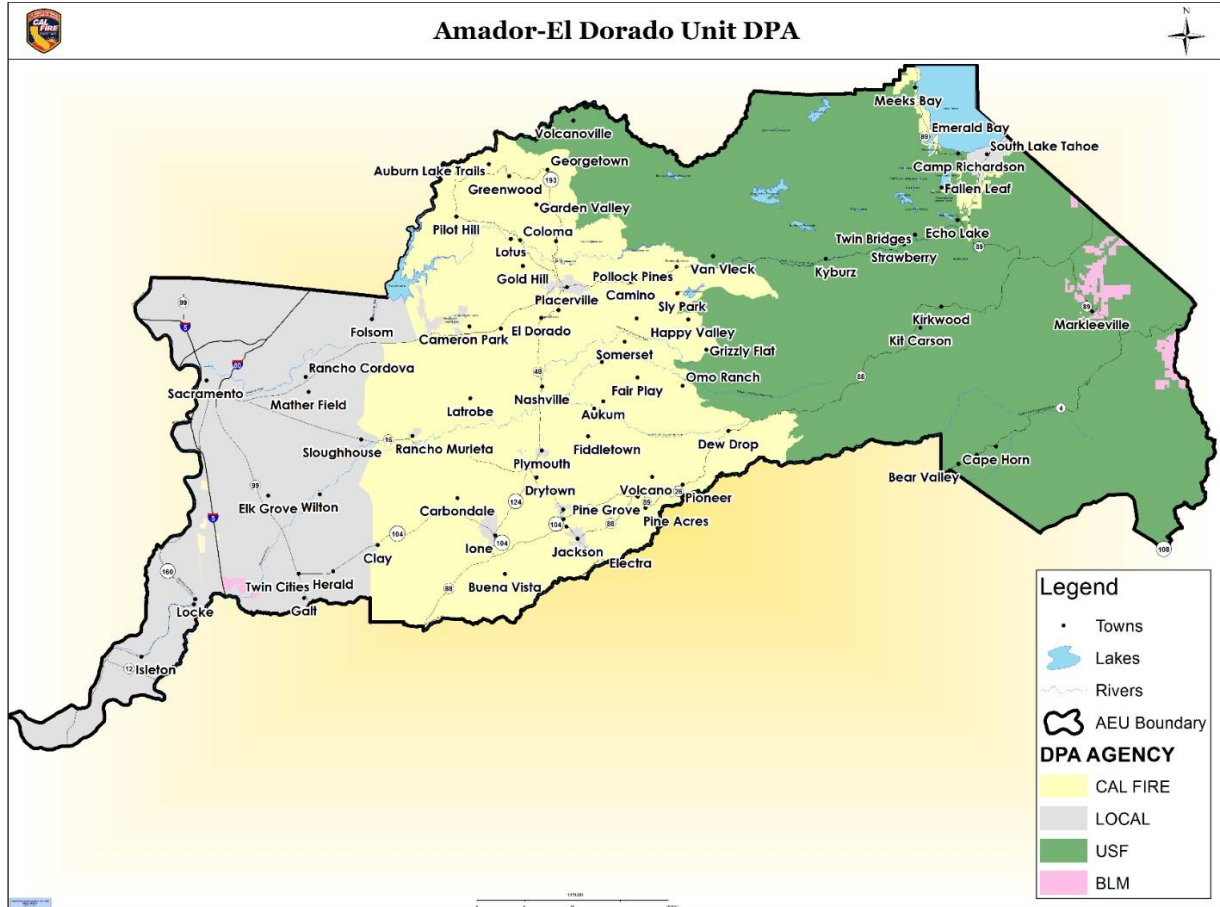


Figure C: Unit DPA Map



**SUPPLEMENT: 2023 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.

**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:

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

In September of 2022, the Mosquito Fire burned 76,788 acres in Placer and El Dorado County. There were 5,894 SRA acres burned within AEU. 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 4<sup>th</sup> 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 structures.

Over the past twenty years, population growth and development in the wildland-urban interface (WUI) placed additional homes, businesses, and public infra-structure 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.

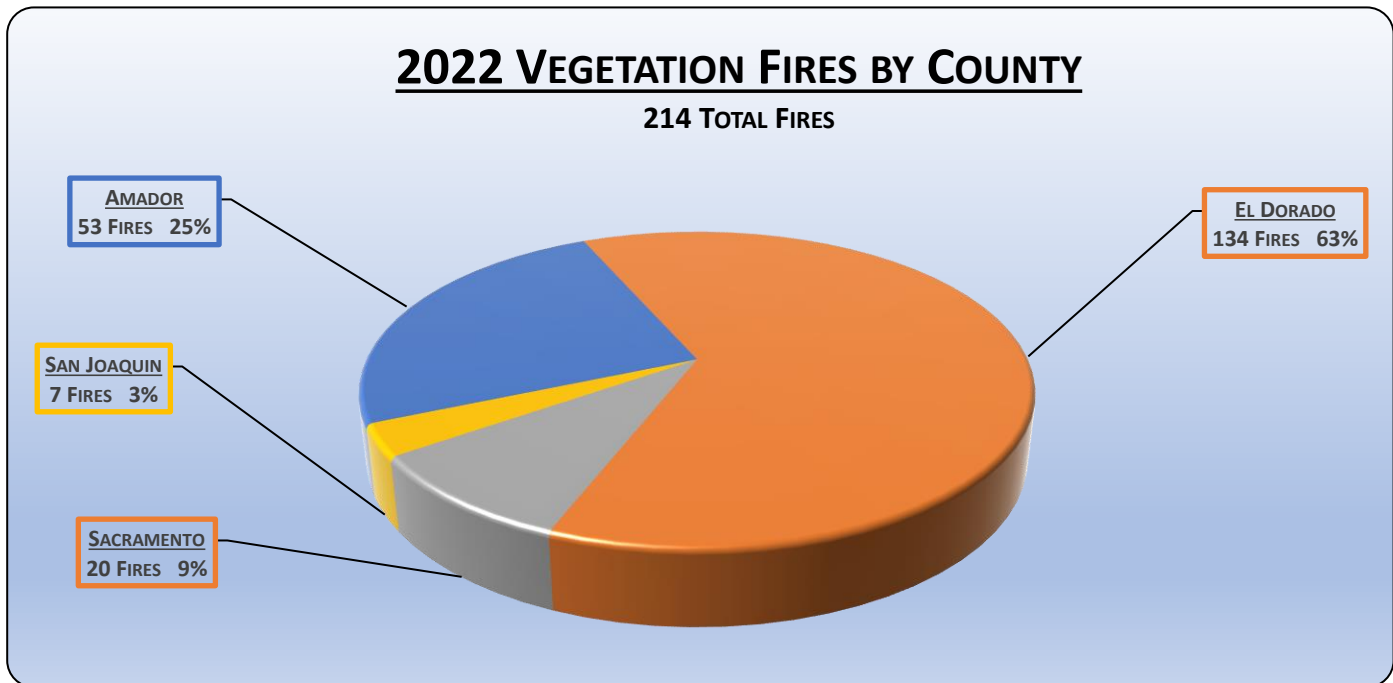
Current statewide and Unit policy requires that a CALFIRS Fire Report (new reporting program as of 2019) be completed for every wildland fire. A wildland fire is defined as any uncontrolled vegetation fire which threatens to destroy life, property or resources and is either unattended or attended by 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 2022.

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.

**2022 Fire Season Ignition Statistics**

Wildland fire ignition statistics were tracked for the entire year of 2022. The Unit experienced 214 wildland fires within its Direct Protection Area (SRA-DPA). There was a decrease of 45 ignitions from 2021 (259 fires) and a decrease of 92 fires from 2020 (306 fires). The 214 fires are 39 fires less than the 10-year average of 253 fires. 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	53
El Dorado	134
Sacramento	20
San Joaquin	7
Alpine	0

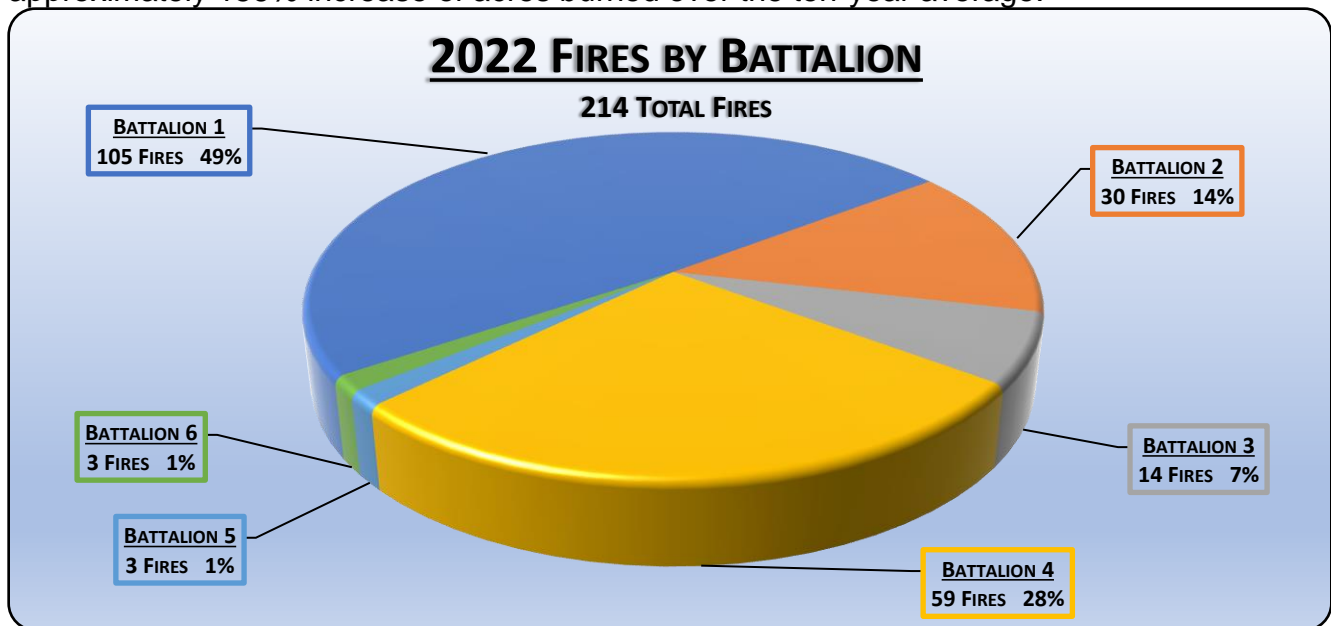


**2022 Five Largest Fires in AEU:**

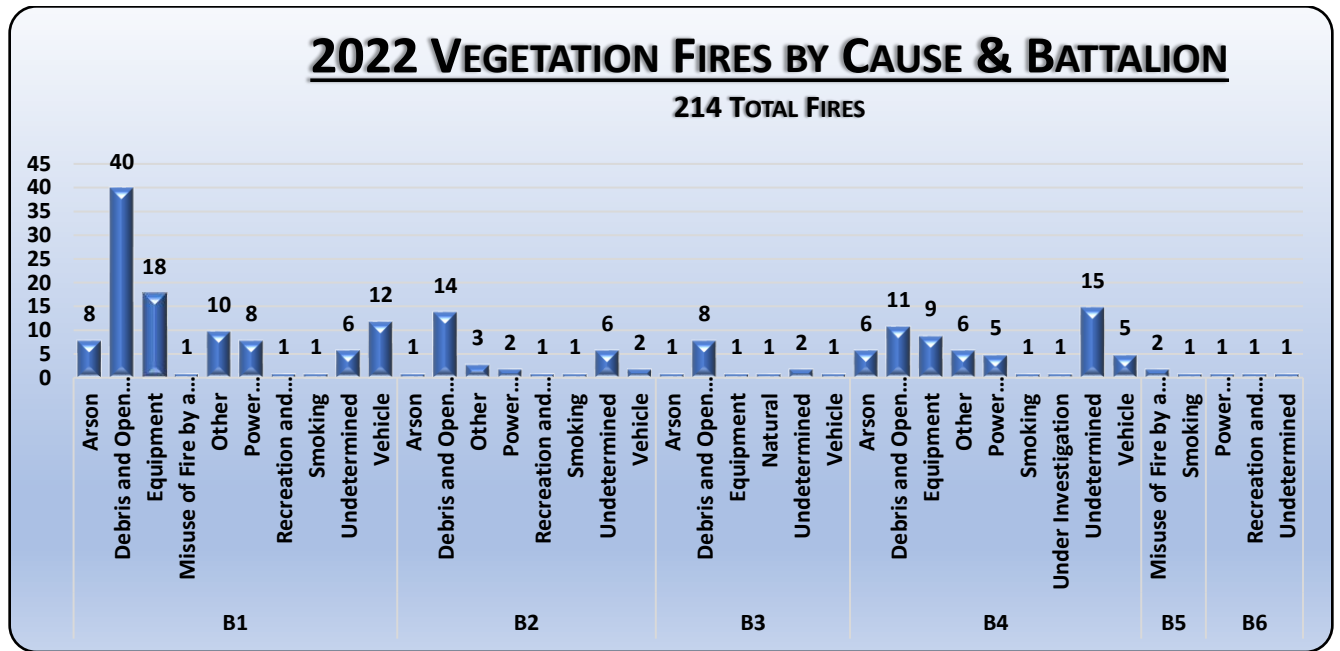
- 1) Electra Fire, started on July 4<sup>th</sup> and burned 4,470 acres in Amador and Calaveras Counties. Several communities were threatened by the fire but no homes were lost. The cause of this fire was undetermined.
- 2) Grant Fire, burned 73 acres of grass and ranchland in Sacramento County. The fire was caused by a subject attempting to burglarize the Boys Ranch Facility that has recently been acquired by AEU for Firefighter Crews. The subject was arrested and is currently on bail awaiting trial.

- 3) Nelda Fire, burned 28 acres in Sacramento County. The cause of this fire was undetermined.
- 4) Latrobe Fire, burned over 26 acres in El Dorado County. The cause of this fire was Cal Trans mowing on the shoulder of Highway 50. No structures were damaged or destroyed but there was moderate damage to power and communication infrastructure.
- 5) Cable Fire, burned 21 acres in El Dorado County. The cause of this fire was broadcast burning weeds with a propane torch on a hot and windy day in late July. The responsible party was identified, and a case was submitted to the El Dorado County DA and was settled out of court.

Calculating all the fires that started within the Unit's DPA in 2022, approximately 4,830 acres burned, with the Electra Fire contributing to 4,470 acres of that total. In 2021, approximately 487 acres burned, with a 10-year average of 3,094 acres. In 2022, AEU experienced an approximately 156% increase of acres burned over the ten-year average.



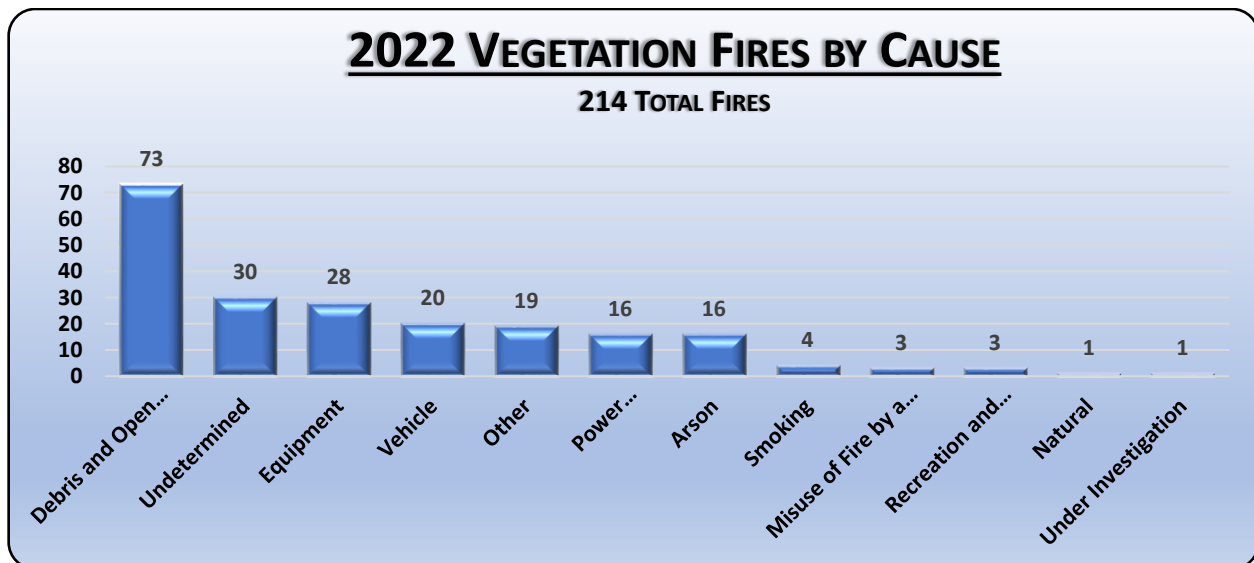




While reviewing fire causes during 2022, it was found that the five leading causes of wildland fires in AEU were:

- 1) **Debris Burning** (73 fires – 34%)
- 2) **Undetermined** (30 fires – 14%)
- 3) **Equipment** (28 fires – 13%)
- 4) **Vehicle** (20 fires – 9%)
- 5) **Other** (19 fires – 9%)

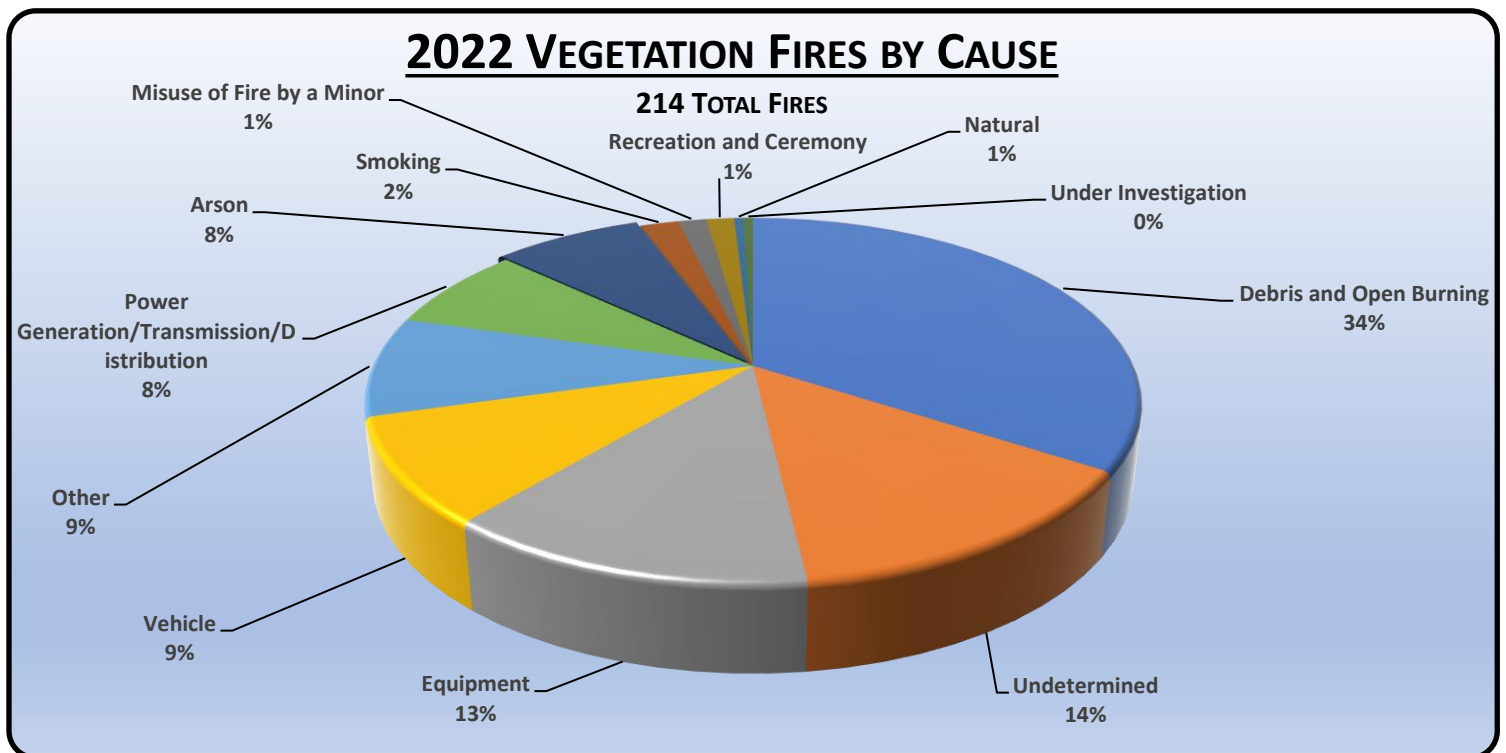
The five leading causes accounted for 170 fires, or 79%, of all 2022 fires that occurred.



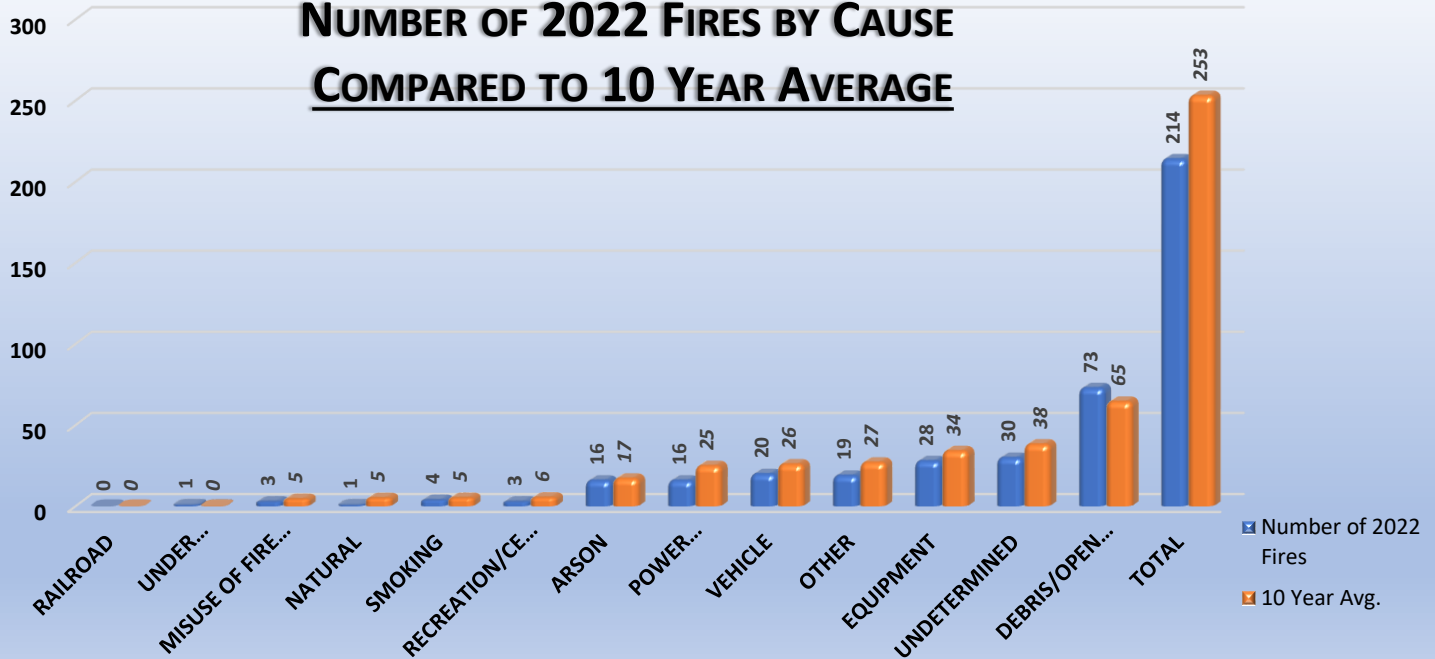
The remaining causes of fires in 2022 within AEU were:

- 6) **Power Generation** (16 fires – 8%)
- 7) **Arson** (16 fires – 8%)
- 8) **Smoking** (4 fires – 2%)
- 9) **Misuse of fire by Minor** (3 fires – 1%)
- 10) **Recreation/Ceremonial Fire** (3 fires – 1%)
- 11) **Natural** (1 fire – <1%)
- 12) **Under Investigation** (1 fire - <1%)

Although the number of ignitions was down 45 from 2021, 2022 showed an 8 ignition increase in Debris/Open Burning as a Wildland Cause category over the 10-year average (65 ignitions). Although this number is higher than 2021, it is much lower than 2020 which is the 10-year high (102 ignitions). With new burn laws/regulations, it is imperative we continue to educate the public on safe burning practices. The number of Undetermined fires increased slightly, from 27 in 2021 to 30 in 2022. 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, taking in to account your training, knowledge, experience, evidence at scene, as well as statements of witnesses to come to your conclusion of the Wildland Cause Class.

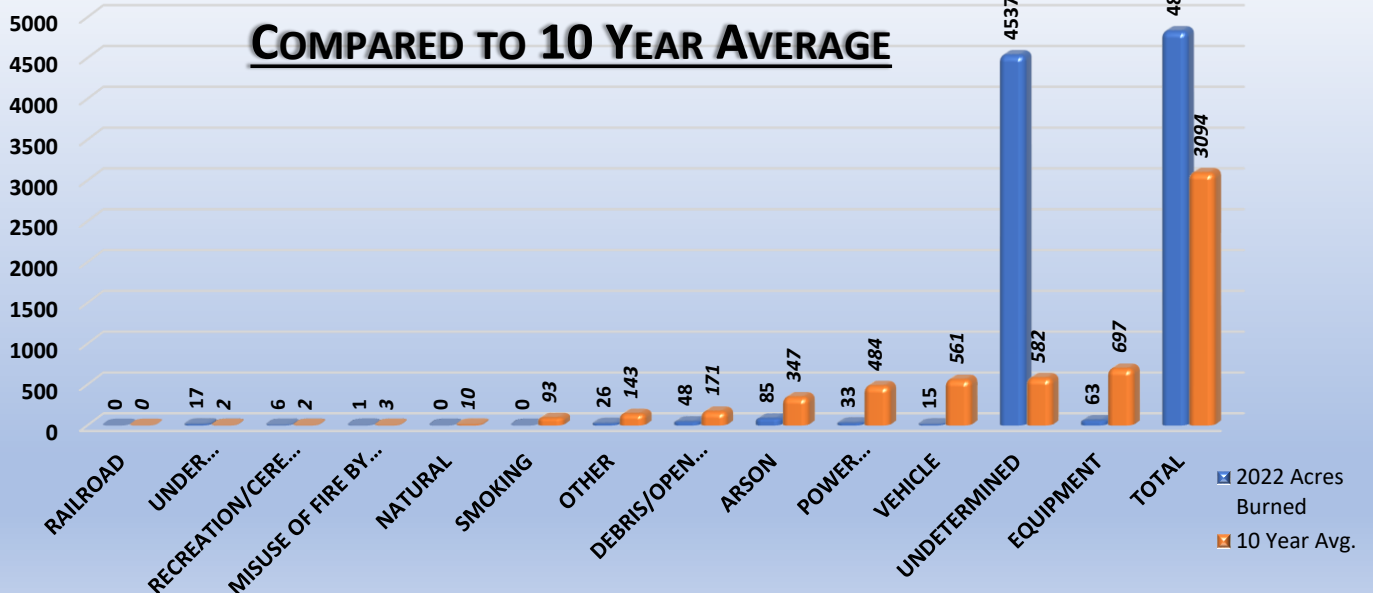


## NUMBER OF 2022 FIRES BY CAUSE COMPARED TO 10 YEAR AVERAGE



In 2022, there were 214 ignitions, 45 less ignitions than in 2021, and 39 less than the 10-year average of 253 fires. To better address ignition management in the Unit, a more detailed analysis of the fires in each major cause classification was conducted.

## 2022 ACRES BURNED BY CAUSE COMPARED TO 10 YEAR AVERAGE



- 1) **Debris burning** accounted for 73 fires, or 34% of the total fires in the Unit. Debris caused fires resulted in approximately 48 acres burned within the unit for 2022. The 10-year average for this category is 171 acres burned. There was a minimal increase in the number of ignitions from Debris Burning from 2021 (72 fires) to 2022. However, 73 ignitions in 2022 is still higher than the 10-year average of 65 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 May 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 also 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.

- 2) **Undetermined** - Fires with an undetermined cause accounted for 30 fires, 14% of the total ignitions in the Unit. Undetermined caused fires resulted in approximately 4,537 acres being burned in the Unit. The 10-year average of acres burned for this cause class is 582 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.

- 3) **Equipment** use accounted for 28 fires, or 13% of the total ignitions in the Unit. Equipment caused fires resulted in approximately 63 acres being burned within the Unit in 2022. This acreage is well below the 10-year average of 697 acres but still has the highest number of acres in all the Wildland Cause Classes. 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.
- 4) **Other** causes accounted for 19 fires, or 9% of the total ignitions in the Unit. Formerly classified as Miscellaneous, Other caused fires resulted in approximately 26 acres being burned within the unit. The 10-year average of acres burned for Other caused fire is 143 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.
- 5) **Vehicles** accounted for 20 fires, or 9% of the total ignitions in the Unit. Vehicle caused fires resulted in approximately 15 acres being burned within the Unit. The 10-year average of acres burned for vehicle caused fires is 561 acres. Vehicle caused fires are typically due to mechanical failures, usually within the exhaust system where hot particles are expelled into the dry vegetation. 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.
- 6) **Power Generation** caused fires accounted for 16 fires, or 8% of the total ignitions in the Unit. Formerly classified as Electrical Power, Power Generation caused fires resulted in approximately 33 acres burned within the Unit. The 10-year average of acres burned for electrical caused fires is 484 acres. The Unit's Law Enforcement & Investigations Staff 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 85 acres in 2022. The 10-year average acres burned for arson caused fires is 347 acres. Arson caused fires are a good reason why investigating fires needs to be conducted quickly, thoroughly and with integrity.

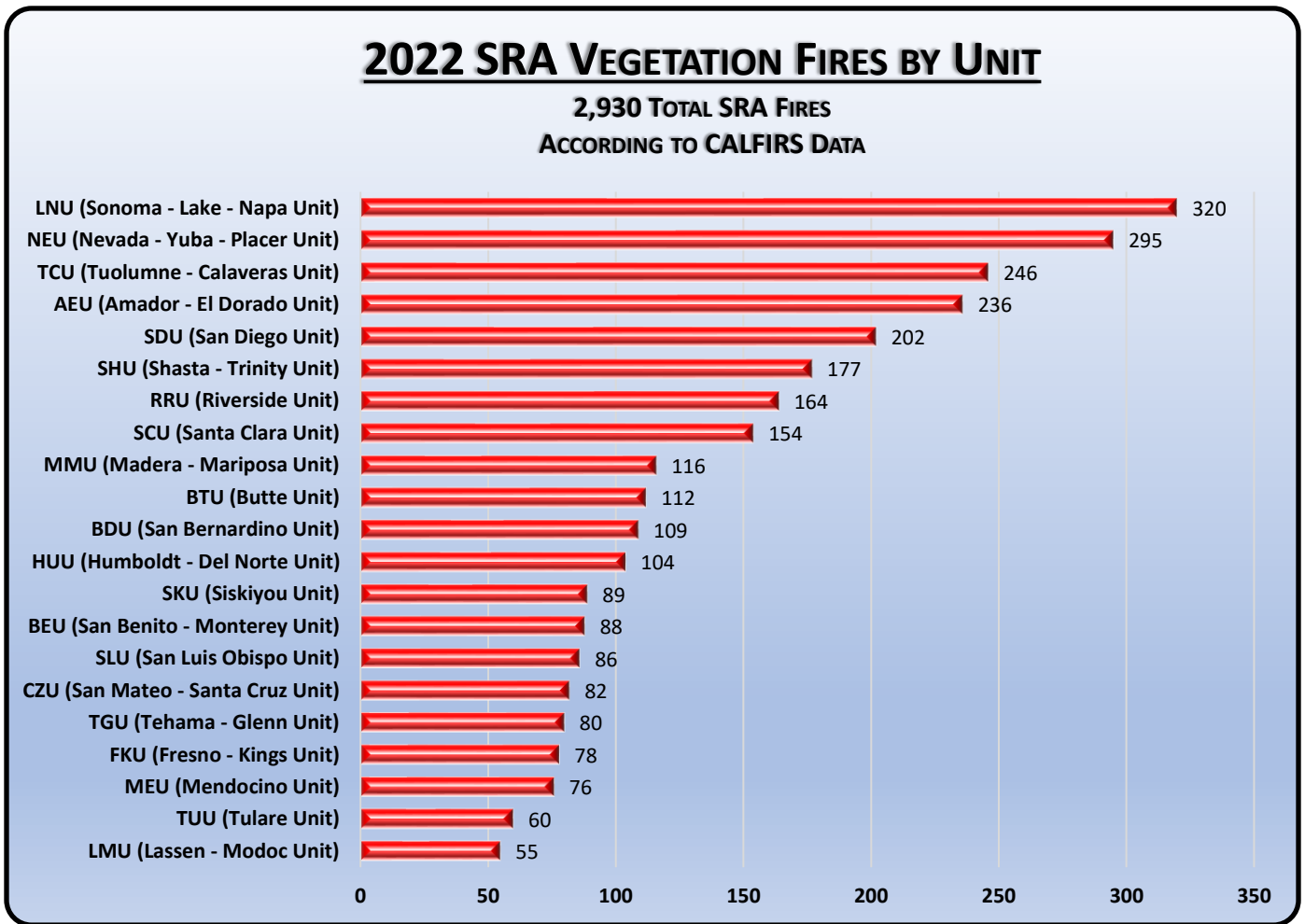
Our continued good working relationships between all fire and law enforcement agencies within the Unit is aiding in successful apprehension and prosecution of arsonists. The importance of a thorough origin and cause investigation plays a key role

in identifying suspicious fire patterns early. Apprehending and prosecuting arsonists is a team approach that depends on everyone.

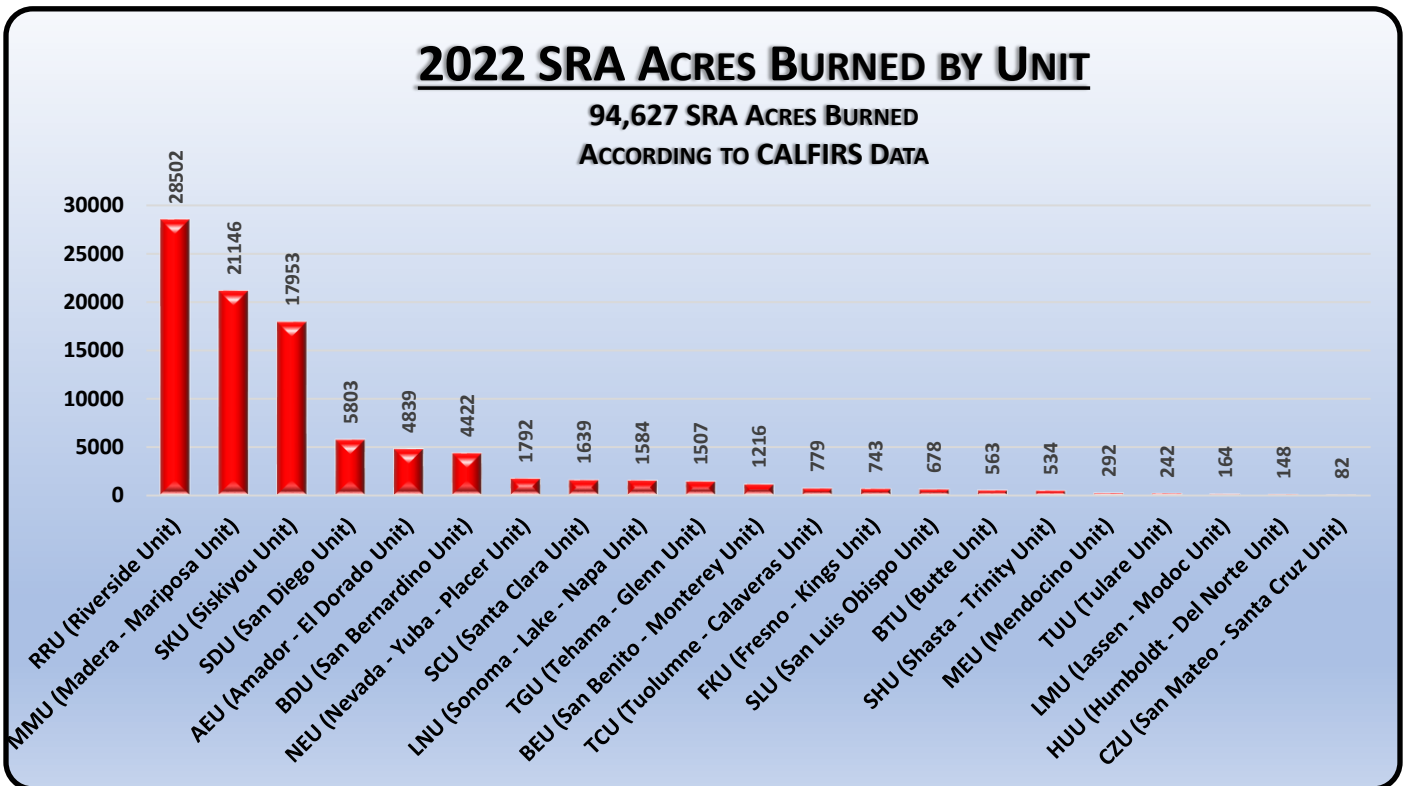
The Unit also benefits from continuous, seven day a week, staffing of the Law Enforcement & Investigations Bureau during fire season and should continue throughout the year. Arson fires occur on a year-round basis and often go overlooked outside of declared fire season due to inadequate staffing. A trained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

- 8) **Smoking** accounted for 4 fires, or 2% of the total ignitions in the Unit. Smoking caused fires burned less than an acre in 2022. The 10-year average of acres burned from Smoking caused fires is 93 acres. Continued public awareness and education will continue to reduce the number of smoking caused ignitions.
- 9) **Misuse of fire by Minor** accounted for 3 fires, or 1% of the ignitions in the Unit. Formerly classified as Playing with Fire, Misuse of Fire by a Minor caused fires burned a little over 1 acre in 2022. The 10-year average of acres burned from Playing with Fire is 3 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.
- 10) **Recreation/Ceremonial fires** accounted for 3 fires or 1% of the total ignitions in the Unit. Formerly classified as Campfire, Recreation/Ceremonial caused fires burned approximately 6 acres in 2022. 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 fallen 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. It should also be noted that the transient population of Amador County has been continuing to increase since approximately 2019. This may lead to more of an issue of transient caused fire in Amador County. CAL FIRE Officers and local law enforcement continues to patrol these encampments to reduce the number of illegal campfires.
- 11) **Lightning** accounted for 1 fire, less than 1% of the total ignitions in the Unit. Lightning caused fires burned less than 1 acre in 2022. The 10-year average of acres burned from lightning caused fires is 10 acres. Not much can be done to prevent or alter this category. In anticipation of predicted dry-lightning events, the Unit will activate its AEU Complex Incident Plan in order to reduce the number of acres burned due to lightning.
- 12) **Under Investigation** is a category added in 2019 when Calfires was introduced. This is a category set aside for CAL FIRE Officers for ongoing cases. In 2022, it accounts for 1 fire, less than 1% of the total ignitions in the unit. This fire burned approximately 17 acres.
- 13) **Railroad** accounted for zero fires in 2022 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.

This 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 236 SRA ignitions for 2022, AEU had the fourth highest number of ignitions, behind LNU, NEU, and TCU.



The below graph shows the Statewide SRA acres burned according to CALFIRS data. Due to the Electra Fire, AEU had the fifth highest acres burned in the state. Without the Electra Fire, the number of acres burned in the unit was 369 acres. The 10-year average is 3,094 acres.





# **Information and Education Program**

## **Public Information Program**

The Unit's Public Information Officer (PIO) provides media press releases, media advisories, and articles; posts and shares information on Unit's social media platforms; coordinates and conducts interviews for television, radio, social media and blogs; prepares and disseminates fire information and incident information fact sheets; provides information on evacuations (in support of local law enforcement); and coordinates public education events with Battalion personnel. Duties also include responding as an Incident Information Officer (Field PIO, PIO Center Manager, PIO in JIC, or PIO on unified command incidents), locally or statewide.

## **Public Education and Awareness Program**

1) School Programs are done throughout the Unit and reach children from preschool through 12<sup>th</sup> grade. The "team teaching" approach is used at the schools and is done on a request basis and is generally handled by engine companies. There is a variety of programs available depending on the request or needs of a particular school. For PreK-6 they include "Captain Cal" educational teaching, "Smokey Bear Team Teaching," "Flannel Board," "9-1-1," "Stop, Drop, and Roll," "Crawl Low Under Smoke," "Exit Drills in The Home," "Friendly Firefighter," "Fire Station Tours." State Farm's Smoke Detectives, Bic's Play Safe-Be Safe, Masters of Disasters, and Learn Not to Burn. Engine companies are also requested to visit schools to read to students in the classroom about fire and life safety.

For 7<sup>th</sup>-12<sup>th</sup> grades, the presentation is given in an assembly setting and the focus will range from Juvenile Fire Setting behaviors to Career Days. The Juvenile Fire Setting (JFS) education program is presented in the following format: introduction; ice breaker; and an explanation of who, what, when, where and why juveniles set fires and the consequences. A discussion follows on making good/bad choices, responsibilities of those choices (civil and criminal), and a review of basic fire safety principals. For Career Days, the program will include an overview of the agency, its mission, and the types of careers available and levels of education required to be competitive in the specific field.

2) Group Programs are done on a request basis and can cover all fire and life safety topics, including Defensible Space, Home Hardening, Disaster Preparedness, preparing a "Go Kit," Senior Fire Safety, and Fire Safety for the Disabled. We provide these presentations to the public, local businesses, groups, clubs. and organizations. Requests vary and presentations may be done in conjunction with another agency, such as a fire or law enforcement agency.

3) Exhibits and Displays are designed and constructed for fairs, parades, home and garden shows, wildfire preparedness week, fire prevention week, burn awareness week, arson awareness week, homeowner association gatherings, National Night

Out, etc. These may be done in concert with another emergency service agency, local government, fire safe council, etc.

- 4) Parades are handled at the Battalion level and requests are directed to the Battalion Chief. If it is appropriate, a fire engine and other equipment may be directed to participate.
- 5) Social media platforms – AEU's Facebook, Twitter, and Instagram – are used to increase awareness and educate the public on fire and life safety topics, including debris burning, defensible space, home hardening, campfire safety, water safety, grilling safety, fireworks safety, forest health, equipment use, returning home after a wildfire, evacuation and emergency preparedness, animal evacuations, fire prevention week, holiday safety (cooking, holiday decorations, and kitchen safety), and home heating. Social media posts and campaigns are handled directly through the PIO.

### **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:

- 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.

### **VIP Program**

The Unit's Volunteers in Prevention (VIP) program staffed the Pilot Peak and Mt. Zion Lookouts and provided support for public information events.

Other activities that VIP's may be recruited for and asked to provide support in:

- 1) Incident Information Center Operators
- 2) LE 100 Defensible Space Inspectors
- 3) Fire and Life Safety Education Programs (Schools, Groups, Events)
- 4) Administrative support for the Unit

This entails recruiting, training, coordinating and supervising activities of Unit VIP's and record keeping (VIP Database, CALATERS, etc.) associated with the program. There will be no minimum number of hours required from a volunteer except for Unit orientation and annual training. The Unit will require at least one program per year for a VIP to stay active.

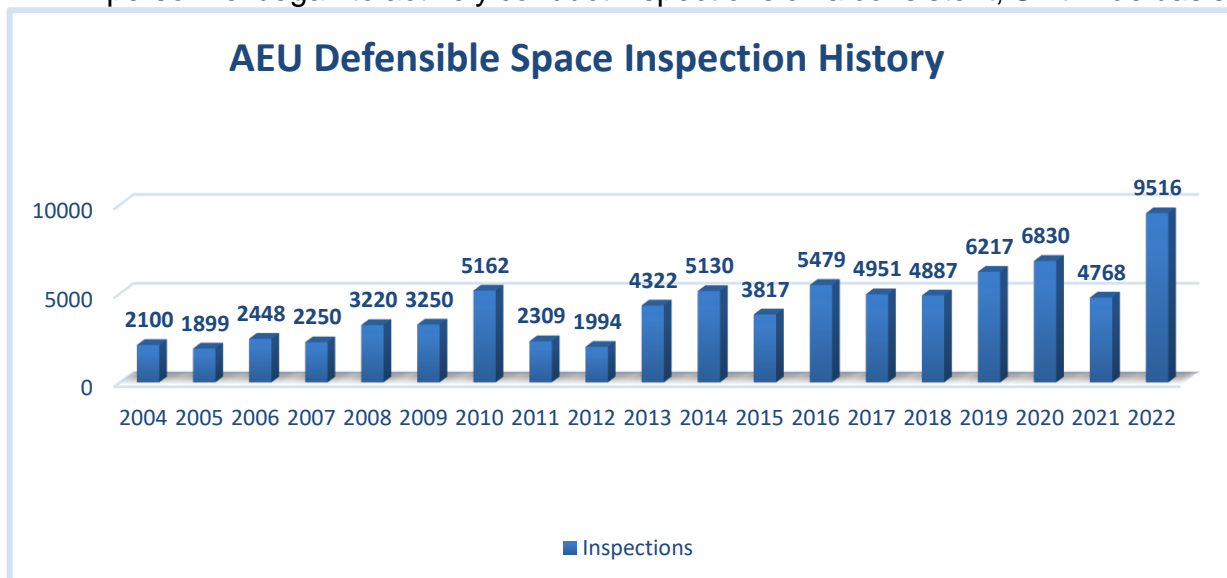
## **LE 100 Defensible Space Program**

In 2022, a total of 9,516 defensible space inspections were conducted in Amador, El Dorado, Alpine, San Joaquin, and Sacramento counties. CAL FIRE-AEU conducted 4,377 total defensible space inspections. These numbers include inspections completed by Forestry Aide Defensible Space Inspectors and CAL FIRE engine companies. A total of 5,139 inspections were performed by El Dorado County Vegetation Management Inspectors, Local Government Fire Personnel, and the City of South Lake Tahoe LRA (VHFHSZ) Inspectors. In addition, AEU Defensible Space Inspectors have the additional workload of conducting defensible space inspections related to real estate transaction under California Civil Code 1102.19.

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

- 1) Identify Target Hazard 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 work being done throughout the Unit.

Below is a historical snapshot of defensible space inspections since 2005. 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.



<b>Defensible Space Inspection Numbers by Year</b>			
<b>Amador-El Dorado Unit</b>			
<b>Year</b>	<b>Inspections</b>	<b>Completed By</b>	<b>Comments</b>
2004	2,100	(Majority VIP, FSC's)	3-0 Staffing
2005	1,899	(Majority VIP, FSC's)	3-0 Staffing
2006	2,448	(Majority VIP, FSC's)	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 1 <sup>st</sup> . Last year of 4-0 staffing.
2011	2,309	CAL FIRE	3-0 Staffing
2012	1,994	CAL FIRE	3-0 Staffing, 4 Forestry Aides hired mid-July
2013	4,322	CAL FIRE	3-0 Staffing, 4 FF1's & 4 Forestry Aides hired in May
2014	5,120	CAL FIRE	3-0 Staffing, 4 Forestry Aides hired in April
2015	3,817	CAL FIRE	3-0 Staffing, 5 Forestry Aides hired in April
2016	5,479	CAL FIRE	3-0 Staffing, 5 Forestry Aides and Surge Capacity
2017	4,951	CAL FIRE	3-0 Staffing, 4 Forestry Aides
2018	4,887	CAL FIRE	3-0 Staffing, 5 Forestry Aides
2019	6,217	CAL FIRE	3-0 Staffing, 3 Forestry Aides
2020	6,830	CAL FIRE	3-0 Staffing, 5 Forestry Aides
2021	4,768	CAL FIRE	3-0 Staffing, 4 Forestry Aides
2022	9,516	CAL FIRE, Local Cooperators	3-0 Staffing, 4 Forestry Aides

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.

## **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. 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.

Public Resources Code (PRC) 4290 requirements address emergency access and water supplies, addressing and street signing, and fuel modification relating to new construction and development. The implementation of these regulations occurs through the local government permit and subdivision map approval process.

PRC 4290 regulations are primarily triggered by the application for a permit for purposes other than limited remodels, including but not limited to, submittal of a tentative subdivision map, tentative parcel map, special use permit, or construction of a road. These regulations do not supersede existing local regulations that are equal to or more stringent than State regulations.

The Wildfire Resiliency Program of the Amador-El Dorado Unit plays a crucial role in ensuring wildfire prevention within the Unit and lands identified as Very High Fire Hazard Severity Zones. The program oversees the enforcement of PRC 4290 and Title 14 of the California Code of Regulations, Section 1270, which are commonly known as the "SRA Minimum Fire Safe Regulations." These regulations are the fundamental standards for wildland fire protection set by the California Board of Forestry and Fire Protection within SRA and LRA Very High Fire Hazard Severity Zones.

## **Access**

Access is a major fire prevention and protection need, whether wildland or structural. Failure to provide reasonable access for emergency equipment and evacuation exits for civilians can result in major loss of life, property and natural resources. Fire apparatus sitting at an intersection, waiting for civilians to exit on a narrow road, cannot provide the necessary fire suppression action. Safe access requires street and road networks that limit dead-end roads and provide reasonable widths, grades, turn-outs, and curves on all roads and driveways.

## **Addressing and Signing**

The difficulty of locating an unnamed or poorly signed road during an emergency, especially under smoky conditions, is a major problem to wildland and structural firefighters. Beyond this, many jurisdictions have allowed duplicate numbering and naming for roads and access, further compounding the location problem. The potential losses of life, property and resources are greater without an adequately visible, reflective sign and consistent addressing and numbering system.

## **Water Supplies**

The application of water and the construction of a fire line are the primary tools used by wildland firefighters to contain and control a wildfire. The location and availability of sufficient quantities of water are essential to fire suppression and firefighter safety. Emergency water supplies are necessary to provide readily available, and accessible, emergency water for structural and wildland fire protection.

## **Fuel Modification Considerations**

The establishment of physical barriers between a structure and the wildland is recognized as a major deterrent and loss reduction measure. Such barriers should be considered key to individual and community defensible space. While fuel breaks have strategic application over large geographical areas, they are expensive to construct and maintain. Other measures, such as the strategic placement of roads, recreational parks, irrigated landscaping, setback from property lines, green belts, open space and fuel modification around structures are more suitable around homes and subdivisions. Strategic ridgelines if identified by the local jurisdiction have been identified to reduce fire risk and improve fire protection. New buildings on strategically important undeveloped ridgelines are prohibited unless Development activities, such as mass grading, will significantly alter the topography resulting in the elimination of ridgeline fire risks.

## **Law Enforcement**

The Unit currently has six active Peace Officers (PC 830.2(g)). Current Peace Officer assignments are as follows:

Division Chief – Admin – 1  
Forester I, Forest Practice – 1  
Battalion Chief, Law Enforcement & Investigations Bureau - 1  
Fire Captain Specialist, Fire Prevention Bureau – 2  
Fire Apparatus Engineer/Paramedic, Battalion 5 – 1

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 six Unit Peace Officers on a routine and consistent basis is limited by current Peace Officer assignments within the Unit. The number of Peace Officers in the Unit has declined from twelve in 2008 to six in 2022.

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, Cadres, Workgroups, Law Enforcement assignments, Serious Accident Review Team deployments and Administrative Investigations.

### **2022 Law Enforcement & Investigations Bureau Statistics:**

- Fire Prevention Bureau officers responded to 200 incidents
  - 9 Arrests were made within the Unit related to arson type fires
  - 4 Citations were issued
  - 2 District Attorney complaints were filed
  - Approximately 70 LE 38's were issued

### **2022 Cadres/Workgroups:**

- 1) FI-210 cadre
- 2) Fire Prevention Advisory Committee
- 3) Sacramento - Sierra Regional Arson Task Force
- 4) Sacramento Regional - High Tech Crimes Task Force
- 5) El Dorado County Fire Arson Task Force
- 6) Amador County Arson Task Force
- 7) Regular Basic POST Academy
- 8) CAL FIRE Firearms cadre
- 9) CAL FIRE Defensible Space Collector App
- 10) El Dorado County Vegetation Management 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).

### **Conclusion:**

In 2022, 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 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 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.

It's the intent of the Amador-El Dorado Unit in 2023 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.